B-122*

cc: Peoria USEPA

File with Part B JH/RC

DEPARTMENT OF THE ARMY
ROCK ISLAND ARSENAL
ROCK ISLAND, ILLINOIS 61299-5000

March 11, 1993

ILS 210 021 833

REPLY TO ATTENTION OF

SMCRI-CO

Mr. Lawrence W. Eastep
Illinois Environmental Protection Agency
Division of Land Pollution Control -- #24
Permit Section
2200 Churchill Road
Springfield, Illinois 62794-9276

Dear Mr. Eastep:

The purpose of this letter is to provide the Illinois Environmental Protection Agency with the Rock Island Arsenal's (RIA) comments to the Agency's letter dated November 30, 1992 denying the RIA's Resource Conservation and Recovery Act (RCRA) Part B Permit Application for a Hazardous Waste Container Storage Unit.

The RIA's comments are being submitted in one package. In the package are located the revisions to correct the deficiencies to the RCRA Part B Permit Application submitted to the Agency. Every deficiency identified by the Agency has been corrected and are to be found on pages which are to be inserted into the November 30, 1992 submission for the corresponding pages. Each new page has the words "Revised March 11, 1993" in the upper right hand corner and should the revision cause an additional page, the pagination reflects this by having each succeeding page number bear an alphabetical suffix.

Please be informed that RIA has deleted five wastestreams from the August 28, 1992 submission. The deletions and rationale are:

a. Hydrochloric Acid Waste - Will be disposed in bulk from the generator site, not in drum containers.

b. Chromic Acid and Lead Sludge - Wastestream is small and will be disposed from satellite site.

c. Chromium Plating Sludge - Wastestream is small and will be disposed from satellite site.

d. Filter Waste - Paint - Wastestream is small and will be disposed from satellite site.

e. Ucon C Sludge - Wastestream hazard characteristic testing indicates it is non-hazardous.

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For further information, please contact the Environmental Coordinator for the Rock Island Arsenal at (309) 782-7855 or 782-7907 or write to:

Commander
Rock Island Arsenal
ATTN: SMCRI-SEM (Environmental Coordinator)
Rock Island, Illinois 61299-5000

Sincerely,

Terry L. Nienhouse
Colonel, U.S. Army
Commanding

Enclosures

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

US EPA

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/524-3300

RCRA Log 122

November 30, 1992

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

DENIAL OF A HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

IEPA #1618130013 -- Rock Island County
USEPA #IL5210021833
Rock Island Arsenal
Permit #122
RCRA Part B - Administrative Record

Commander
Rock Island Arsenal
Attn: SMCRI-CO, Col. Terry L. Nienhouse
Rock Island, Illinois 61299-5000

Dear Colonel Nienhouse:

The Agency hereby denies a Resource Conservation and Recovery Act (RCRA) Part B permit to Rock Island Arsenal to operate a RCRA facility located at Rock Island Arsenal, Rock Island, Illinois. The application for a RCRA permit was received by this Agency on October 18, 1988, and additional information was received by the Agency on August 31, 1992. The final permit decision is based on the administrative record contained in the Agency's files. The contents of the administrative record are described in 35 Illinois Administrative Code (I.A.C.) Section 705.211.

The Agency is required under Section 39(a) of the Illinois Environmental Protection Act (Ill. Rev. Stat., Ch. 111 1/2, par. 1039(a)) to provide the applicant with specific reasons for denial of a permit. The specific reasons for denial of this permit are contained in Attachment A of this correspondence.

Within 35 days after the notification of a final permit decision, the permittee may petition the Illinois Pollution Control Board to contest the issuance of the permit. The petition shall include a statement of the reasons supporting a review, including demonstration that any issues raised in the petition, were previously raised during the public comment period. In all other respects the petition shall be in accordance with the requirements for permit appeals as set forth in 35 I.A.C. Part 105. Nothing in this paragraph is intended to restrict appeal rights under Section 40(b) of the Environmental Protection Act (35 I.A.C. 705.212(a)).

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State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

If you have any questions regarding this Permit Denial, please contact Kevin D. Lesko at 217/524-3271.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control
Bureau of Land

LWE:KDL:sf/sp/9991Z,1-2

Enclosure: RCRA Part B Permit Denial

cc: USEPA Region V, George Hamper, w/enclosure
Dr. David Foss, Rock Island Arsenal

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

Attachment A

Illinois Environmental Protection Agency

Reasons for Denial of the
RCRA Part B Permit for Rock Island Arsenal
Part B Log No. B-122
DLPC No. 1618130001
IL5210021833

November 1992

The applicant, Rock Island Arsenal (RIA), initially submitted their Part B permit application to store hazardous waste, generated on-site during operations at the arsenal. RIA has since modified their application to include a request for storage of hazardous waste within Building 249 which was to be built, as specified in the permit, following approval of the Part B application. RIA's initial application was submitted in October of 1988. Since then, RIA has responded to two (2) completeness Notice of Deficiencies (NODs) and two technical NODs. These responses were in the form of revised applications and proposed revisions to the application. A third technical review was conducted on RIA's revised application, dated December 1991. As a result of this third technical review, it was determined that RIA's response was not sufficient to deem the application technically adequate. Failure to correct the deficiencies noted in the previous NODs as required by 35 IAC, Subtitle G, Section 705.123 was the basis for the Agency's issuance of the draft denial in July of 1992. Following the issuance of the draft denial RIA submitted, pursuant to 35 IAC 705.181, proposed revisions to the application in an attempt to address the deficiencies identified in the draft denial. A technical review of the proposed changes was conducted. This review concluded that the proposed changes were not sufficient to deem the application technically adequate. The extent of these deficiencies was such, that issuance of the permit with a compliance schedule or some other mechanism for obtaining the necessary information would not be feasible.

The following deficiencies are the specific reasons for denial of the subject permit (All regulatory references are to 35 IAC, Subtitle G: Waste Disposal):

A. Part A Application: 703.123, 702.126, and 703.181

RIA failed to submit a Part A application which is consistent with the Part B application. The following inconsistencies were identified:

1. Item XII C. "Process Total Number of Units" RIA identifies the total number of units as being 294. The Part B application is for <u>two</u> container storage units, Buildings 242 and proposed Building 249.

2. Item XIV. The Part B application, Section C, identifies F006 waste as a wastestream to be stored in the units. The Part A application does not identify this wastestream as being stored in the container storage units.

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

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C. WASTE CHARACTERISTICS

C-1 Chemical and Physical Analyses: 703.183, 724.113

1. The application failed to contain the following information regarding the various wastestreams to be managed at the facility:

   a. Oil contaminated with 1,1,1-Trichloroethane. No detailed analytical data is provided regarding the possible metal contaminates that may be present in the waste. Waste of this type often contain metal contaminates which cause them to be characteristically hazardous.

   b. Wastewater from Silver Recovery Solutions: The waste is identified as D011. RIA failed to provide laboratory data in order to properly characterize this waste. The material safety data sheet (MSDS) for the replenisher indicates that it may be characteristically hazardous due to corrosivity, and ignitability.

   c. Chromium Plating Sludge. In Appendix A RIA indicates that MSDSs are enclosed in order to assist in the characterization of the waste. RIA failed to provide these MSDSs.

   d. Cadmium Solution Waste. The MSDSs provided for this waste indicate that it may contain flammable components which may cause the waste to be characteristically hazardous due to ignitability. The "generator knowledge" section does not provide insight as to why this material would not be ignitable. No analytical data is provided. RIA failed to identify how the material identified in the MSDSs are used in the process or if these are the only materials in the process that generates this wastestream.

   e. Ucon C Sludge: This waste is identified as D007 based upon limited analysis (chromium and cadmium), a MSDS for UNOCON C, and user knowledge. RIA failed to identify how the material identified in the MSDSs are used in the process or if these are the only materials in the process that generates this wastestream.

   f. Waste Stop Off Wax: This waste is identified as being D006 based upon limited (metals only) TCLP analysis and user knowledge. The TCLP analysis indicates that TCLP chromium is present at 3 mg/l. The regulatory TCLP chrome limit is 5.0 mg/l. It would appear that it is possible that the waste may also be hazardous due to chrome at times. The variability of the waste should be investigated.

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g. Chromic Acid and Lead Sludge. This waste is identified as being D002, D006, D007, and D008 based upon MSDSs and limited analysis including TCLP metals, reactivity, ignitability, and corrosivity. A MSDS is included for Chlorothene VG (R) Solvent, this solvent contains 96% 1,1,1-Trichloroethane. RIA failed to identify how the material identified in the MSDSs are used in the process. This waste may also be classified as an F- listed waste depending on the manner in which the 1,1,1- Trichloroethane is used in the process.

h. Degreaser Still Sludge. The waste is identified as F001 waste based upon user knowledge. No detailed analytical data information is provided regarding the possible metal contaminates that may be present in the waste. Waste of this type often contain metal contaminates which cause them to be characteristically hazardous. RIA failed to investigate the possibility that this waste may contain metals which may make the waste characteristically hazardous.

i. Blankrola: The waste is identified as D001, and F001 waste based upon user knowledge, and MSDSs. The MSDS indicates that the solvent contains perchloroethylene and petroleum naphtha. MSDSs are also included for the printing inks used in the operations. Table 1 of the MSDSs Weight Percent Copper and Barium Compounds in PMS Colors, inidicates that the inks contain up to 28% barium. It would appear as though it is possible that this waste may also be D005 waste due to the presence of barium in the wastestream. RIA failed to investigate the possibility that the material may be characteristically hazardous due to barium.

C-2b Test Methods: 724.113

RIA failed to identify the test methods to be used for 2- Ethoxyethanol and 2-Nitropropane.

C-2f Additional Requirements for Ignitable, Reactive, or Incompatible Waste: 724.113, 724.117

1. Based upon the information provided, RIA failed to properly classify the wastestream to be stored in the units for compatibility. RIA attempted to classify their wastestreams according to 40 CFR Appendix V and OSWER Document # 9938.4. 40 CFR Appendix V breaks the wastestreams into compatibility groups 1A, 1B, 2A, 2B, ... 6A, and 6B. OSWER Document # 9938.4 breaks the wastestreams into reactivity group numbers (RGNs), the RGNs are then compared to determine if two wastestreams are compatible. The following wastestreams were not properly classified:

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a. Wastewater from Silver Recovery: Based upon the information provided and according to the OSWER document the waste should also be classified under the RGN 3. This is due to the fact that Appendix A of the application indicates that acetic acid is present in the wastestream.

b. Filter Waste Paint: Based upon the information provided and 40 CFR Appendix V the wastestream should be classified under the compatibility group 2A, not group 2B as identified in Table 7. This is due to the fact that Appendix A indicates that chromium is present in the wastestream. Map S indicates that the waste is in group 2A. In addition, based upon the OSWER document the wastestream should also be classified under the RGNs 16 and 19. This is due to the fact that Appendix A of the application indicates that toluene and methyl isobutyl ketone are present in the wastestream.

c. Zinc Phosphate Sludge: Based upon the information provided and 40 CFR Appendix V the wastestream should be classified under the compatibility group 2A, not group 2B. This is due to the fact that Appendix A of the application indicates that chromium, lead, barium, cadmium, silver, and arsenic are present in the wastestream.

d. Cadmium Solution: Based upon the information provided and the OSWER document the wastestream should also be classified under the RGNs 4 and 19. This is due to the fact that Appendix A of the application indicates that methyl alcohol and acetone are present in the wastestream.

e. Hydrochloric Acid: Based upon the information provided and the OSWER document the wastestream should also be classified under the RGN 21. This is due to the fact that Appendix A of the application indicates that lead, barium, and chromium are present in the wastestream.

f. Ucon C Sludge: Based upon the information provided and the OSWER document the wastestream should also be classified under the RGNs 4 and 22. This is due to the fact that Appendix A of the application indicates that polyalkylene glycols and nitrite are present in the wastestream.

g. Cadmium Solution Waste: Based upon the information provided and the OSWER document the wastestream should also be classified under the RGNs 4 and 19. This is due to the fact that Appendix A of the application indicates that methyl alcohol and acetone are present in the wastestream.

h. Chromic Acid and Lead Sludge: Based upon the information provided and the OSWER document the wastestream should also be classified under the RGN 17. This is due to the fact that Appendix A of the application indicates that 1,1,1-trichloroethane is present in the wastestream.

i. CARC Paint: Based upon the information provided and the OSWER document the wastestream should also be classified under the RGNs 13, 17, 19. This is due to the fact that Appendix A of the application indicates that butyl acetate, 1,1,1- trichloroethane, and methyl isobutyl ketone are present in the wastestream.

j. Blankrola: Based upon the information provided and the OSWER document the wastestream should also be classified under the RGN 17. This is due to the fact that Appendix A of the application indicates that perchloroethylene is present in the wastestream.

D. PROCESS INFORMATION

D-1a(2) Container Management Practices: 724.273

1. RIA failed to identify the procedures that will be used for the (1) removal of waste from the containers, (2) addition of waste to the containers, (3) re-packing of the containers, and (4) sampling of waste within the storage area. RIA indicates that no waste will be added or removed from the containers at the storage area. The containers will be returned to the generating site for adding or removing waste, re-packing and sampling. Waste which has been in storage for greater than 90 days may not be removed from the storage area, except for transport off-site, as this would constitute creation of a RCRA storage area, therefore, the procedures must be identified.

2. RIA failed to identify the maximum number of 20, 85, and 95 gallon containers to be stored in the storage units.

D-1a(3) Secondary Containment Design and Operation: 703.201, 724.275

1. RIA failed to identify the location of the "design package" in the application. Attachment A, of the cover letter to the proposed revisions, indicates that the design package is located in Appendix F.

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2. RIA failed to provide plan and profile drawings of the container storage units. RIA states that the plan and profile drawings are located in the design package, however these drawing could not be located in the design package, Appendix F.

   References to other sections of the application must be specific. Referencing the location of the plan and profile drawings as being in the design package is not acceptable as Appendix F contains two (2) bound documents entitled: (1) Specifications for Renovate Building 242 and Construct Building 249, approximately one inch thick, and (2) Renovate Building 242 and Construct Building 249 - PR 88-91 - Design Analysis, approximately three-quarters of an inch thick.

3. Map S contains a note which indicates that the location of the waste within Building 242 will change based upon the quantity of wastes being processed. RIA has failed to describe how the changing of the location of the waste within Building 242 will be addressed to assure that (1) incompatible waste will not be placed in the same secondary containment area (SCA), (2) how the location of the waste will be identified in the operating record, and (3) how the waste within a given SCA will be identified to assure that incompatible waste will not be placed in the same SCA.

4. RIA failed to identify how the 20, 85, and 95 gallon drums will be arranged on the pallets and within the secondary containment areas (SCAs), including the cabinets.

5. RIA failed to identify the waste to be stored in the storage cabinets within Building 242.

D-1a(3)(a) Requirements for the Base or Liner to Contain Liquids: 724.275

1. RIA failed to demonstrate that the cabinet liners are compatible with the waste to be stored in them. The polyethylene liner specifications for the cabinets are in Appendix G. The manufacturer's information in Appendix G does not provide information on the cabinet liner other than identifying it as being polypropylene liner and not polyethylene as indicated in Section D-1a(3)(a) of the application.

2. RIA has failed to demonstrate that the proposed floor and joint sealer are compatible with and impervious to the waste that RIA proposes to store in the units.

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RIA proposes to use MAGMA CR 1 to seal the base of the containment areas, and MP ELASTOMER as a joint sealer. RIA states that Table 1 contains the chemical resistive abilities, and that the technical data sheets of the MAGMA CR 1 and the MP ELASTOMER are located on pages 3 and 4. The source of the data in Table 1 is not identified. Also, Table 1 states that of the thirteen (13) chemicals identified as components of the waste to be stored in the units seven (7) are rated as "G" and one (1) is rated as "F". The "G" rating is identified as being for "short immersion, splashing, spillage." The "F" rating is for "short immersion, splashing, spillage, need to clean up sooner than G." The length of time that "short" and "sooner" represent is not defined. In addition, pages 3 and 4 are the Product Specification Sheets for BENLZONA MAGMA CR BARRIER. There is no indication that the information in these technical data sheets apply to the MAGMA CR 1 and the MP ELASTOMER products.

3. RIA failed to adequately identify the location of the information regarding the selection of the liner for the storage units. RIA states, "The design analysis package, Volume 1 in Appendix F addresses the selection of the liner." Neither of the documents contained in Appendix F are identified as Volume 1. The information regarding the selection of the liner was located in Appendix F, Chapter 6 of the document entitled Design Analysis. References to other portions of the application must be specific. Referencing the location of the liner selection analysis as being in the design analysis package, Volume 1 is not acceptable as the design package is contains approximately one and three-quarters of an inch of material.

4. RIA failed to provide a statement that the base is free of cracks and/or gaps.

5. RIA failed to provide information on the base design and material of construction, and the engineering evaluation of the base's structural integrity. RIA has failed to provide the following information to meet the above requirements:

   a. Construction drawings:

      1. plan and section views of the design;

      2. type and location of steel reinforcing;

      3. location of construction joints;

4. details of construction joints design, including how they will be sealed, e.g., details of water stops to be used;

5. appropriate construction details;

6. plan and profile views of the base design.

b. As built drawings including the above information, as available, for the existing structure.

c. Design specifications of construction materials, as necessary, to assure the structural adequacy of the base.

d. Site specific geotechnical information on which the base and footings were designed.

e. Engineering calculations used in the structural design of Building 249 and in the evaluation of Building 242 and its proposed modifications.

The above information must be certified and sealed by an Illinois registered professional engineer.

D-1a(3)(c) Containment System Capacity: 703.201, 724.275

1. RIA has failed to address the 85 and 95 gallon drums that may be stored in the units. Storage of the larger drums may cause the capacity of the SCA to be exceeded. Based upon the containment capacity of the SCAs, if a given SCA is filled with 55 gallon drums with the exception of two drums which are 95 gallon drums, the capacity of the SCA will be exceeded due to the presence of these larger drums.

2. RIA has failed to identify the arrangement of the 20 gallon containers, see deficiency D-1a(3), Item 4. Depending on the arrangement of the containers it may be possible to exceed the capacity of a given SCA.

D-1a(3)(e) Removal of Liquids from the Containment System: 703.201, 724.275

1. RIA has failed to identify the response procedures for the removal of spilled material. RIA indicates that the response procedures for the removal of spilled material is identified in Appendix B of Section G. However, Appendix B of Section G is entitled Levels of Personal Protection. It does not identify the response procedures for the removal of spilled material. See deficiency G-4i.

2. RIA failed to demonstrate how accumulated liquids within the sump of the storage cabinets will be identified and removed. The design of the cabinets would appear to make it difficult, at best, to determine if any spilled material has accumulated in the bottom of the sump. It would appear as though the containers and the grating would have to be removed in order to inspect the sump for liquids and remove any liquids that may have accumulated.

F. PROCEDURES TO PREVENT HAZARDS

F-2a General Inspection Requirements: 703.183, 724.115, 724.133

1. RIA failed to include the fire suppression system, shown in Map T, in the Building 249 inspection schedule.

F-2a(1) Types of Problems: 724.115

1. RIA failed to identify the types of problems to look for as related to the fire suppressing system located in Building 249.

F-2b(1) Container Inspection: 724.274

1. RIA failed to provide adequate aisle spacing or to detail inspection procedures for the storage cabinets to identify leaking containers and determine if deterioration of the containers has taken place. Only the front side of two drums would be visible, based upon the arrangement of the containers shown in Map S.

2. RIA failed to identify the procedures used to determine if liquids are present in the sumps of the storage cabinets. Based upon the design of the cabinets as shown in Map S it would appear as though the containers and the grating would have to be removed from the cabinets to determine if any liquid were present in the sump, see deficiency D-1a(3)(e).

F-4a Unloading Operations: 703.183

1. RIA provided contradictory information regarding spill response equipment to be used in case of an emergency. RIA states, "In the event of a spill, spill response materials and equipment are available. See Section G-5a for a list of equipment available at Building 242." Section G-5a states, "Local storage of additional spill control equipment is unnecessary since containers are never opened after delivery to Building 242."

2. RIA failed to identify procedures to assure that wastes which are incompatible will not be mixed in the event of a spill during unloading operations. If a spill was to occur during movement of waste into the building, prior to being placed in the appropriate SCA, the waste being moved could flow into a SCA where an incompatible waste may have been stored. If the waste that is stored within this SCA has leaked or spilled, the incompatible waste could mix causing a reaction. The SCAs should be inspected prior to the movement of waste into, within, or out of the storage units to determine if any material is present in the SCAs.

F-4e Personnel Protective Equipment: 703.183

1. RIA failed to identify the personnel protective equipment (PPE) that will be used to respond to a release of a given wastestream. RIA states, in the event of a release the Installation HAZ-MAT team will respond. The initial response will be made in Level A PPE until the release has been characterized. Once the release has been characterized appropriate PPE will be used. An evaluation of <u>each</u> wastestream is needed in order to determine what PPE should be used to respond to an incident. The PPE used to respond to an incident must be identified in the application. A description of the evaluation that was conducted on each wastestream must also be included in the application.

F-5d Management of Incompatible Waste in Containers: 703.201, 724.277

1. RIA failed to demonstrate that potentially incompatible wastes will not be stored within the same SCA. RIA proposes to store potentially incompatible waste within the same SCA according to the application (e.g., Tables 7 and 8, and Map S), and 40 CFR 264, Appendix V, and the OSWER Document #9938.4. RIA classified each of its wastestream pursuant to 40 CFR 264, Appendix V, and OSWER Document #9938.4. These classifications are identified in Tables 7 and 8 of the application. Review of Appendix V, and the OSWER Document #9938.4 indicates that the following potentially incompatible wastestreams may be placed within the same SCA:

   a. SCA 1A: Black oxide sludge (RGN 10), wastewater treatment plating sludge (RGN 21), and floor sweepings (RGN 21) may not be compatible. The mixing of these wastestreams may generate flammable gas and heat.

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2200 Churchill Road, Springfield, IL 62794-9276

b. SCA 1B: Hydrochloric Acid (RGN 1, 21*), and Cadmium Solution (RGN 21, 4*, 19*) may not be compatible. The mixing of these two wastestreams may generate flammable gas, heat and cause fire. The mixing of wastestreams with RGNs of 1, 4, and 21 may generate flammable gas, heat and fire. The mixing of wastestreams with RGNs of 1, 4, and 19 may generate heat. The mixing of wastestream with RGNs of 19, and 21 may generate flammable gas, and heat.

c. SCA 2B: Zinc Phosphate Sludge (RGN 21), there is no SCA identified on Map S for this waste.

d. SCA 2A: Sandblast Sand (RGN 21), Range Sand/dust (RGN 21), Ucon C Sludge (RGNs 21, 4*, 22*), Emission Control Dust - steel production (RGN 21), Lead Anodes (RGN 21), Zinc Phosphate Sludge (RGN 21), and Filter Waste-paint (RGNs 21, 16*, 19*). The mixing of wastestreams with RGNs of 4, 21, and 22 may generate flammable gas, heat and cause fire. The mixing of wastestreams with RGNs of 19, 21, and 22 may generate flammable gas, and heat.

e. SCA 4A, Building 249: Carc Paint with Solvents (RGNs 32, 13*, 17*, 19*, and 21*), and Blankrola (RGNs 32, 17*, and 21*). The mixing of wastestreams with RGNs of 13, 19, and 21 may generate flammable gas, and heat. The mixing of wastestreams with RGNs of 17, and 21, may generate heat and explosion. The mixing of wastestreams with RGNs of 21, and 32 may generate heat, gas, and fire.

f. SCA 4A: Oil with TCE (RGN 17), Degreaser Still Sludge (RGN 17), and Waste Stop Off Wax (RGNs 21 and 17*). The mixing of wastestreams with RGNs of 17, and 21, may generate heat and explosion.

g. SCA 6A: Chromic Acid and Lead Sludge (RGNs 2, 21, 35), and Chromium Plating Sludge (RGNs 21 and 17*). The mixing of wastestreams with RGNs of 2, and 17, may generate toxic gas, heat and fire. The mixing of wastestreams with RGNs of 2, and 21 may generate flammable gas, heat, and fire. The mixing of wastestreams with RGNs of 17, and 21, may generate heat and explosion. The mixing of wastestreams with RGNs of 17, and 35, may generate heat and toxic gases. The mixing of wastestreams with RGNs of 21, and 35, may generate heat, fire, and explosion.

NOTE: The * following an RGN (reactivity group number) indicates that RIA did not identify the wastestream as being classified under these RGNs, see deficiency C-2f for additional information.

In order to store the wastestream together, as identified above, RIA would need to provide additional information which demonstrates that the above combinations are indeed compatible.

G. CONTINGENCY PLAN: 703.183, 724.137, 724.150 through 724.156, 724.152

G-2 Emergency Coordinators: 724.152, 724.155

RIA has failed to demonstrate that an emergency coordinator (EC) will be present on-site at all times, or able to reach the facility in a short period of time.

G-3 Implementation: 724.151, 724.152, 724.156

1. RIA has failed to adequately describe when the contingency plan will be implemented. RIA indicates that the contingency plan will be implemented whenever there is a fire, explosion, or release of any size which would threaten human health or the environment. RIA indicates that the EC will determine if notification of the local surrounding municipality is required. RIA failed to describe the criteria that would be used to determine when a fire, explosion, or release would be of sufficient size to cause implementation of the contingency plan and notification of the surrounding municipalities. Each wastestream should be evaluated in order to make this determination.

2. RIA failed to describe the location of the alarm signals to be used to notify facility personnel of the need for evacuation. RIA states, on page 117A of the application, "The alarm signals are identified on page 188A." The application does not contain page 188A.

G-4 Emergency Response Procedures: 724.156

1. RIA failed to describe the warning signals that will be used in the event of an emergency. RIA states that the appropriate warning signals are described in the RIA Disaster Control Plan, Appendix II. Appendix II could not be located. In addition, references to other sections of the application must be specific. The specific sections of the RIA Disaster Control Plan that identify the warning signals used must be identified and included in the application.

G-4a Notification: 724.156

1. RIA failed to describe how facility personal in the area of the storage units will be notified in the event of an emergency.

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2. RIA failed to describe the procedures that will be used to notify the outside emergency response groups, such as the local police and fire departments. This information is necessary since RIA failed to demonstrate that a release of any material to be stored within the units will not impact areas outside of the facility.

3. RIA failed to identify the local officials that the EC will notify if it is determined that evacuation of areas outside of the facility may be necessary.

G-4b Identification of Hazardous Materials: 724.156

1. RIA failed to describe the procedures that will be used to ensure that persons investigating a release will not be exposed to undue danger from the released material. For example, what type of PPE will be used when trying to determine the character, exact source, amount, and areal extent of a release.

2. RIA failed to adequately describe the procedures that will be used to assess the character of a release. RIA failed to evaluate each wastestream in order to properly identify the character of a release. For example, a spill of a volatile liquid will release volatile gases into the air. If a release of volatile liquid were reported as a liquid spill only, very dangerous releases of gases may not be taken into account.

3. RIA has failed to adequately describe the procedures that will be used to identify the source of a release. RIA states, the source will be identified by visual observation, i.e., is the involvement in Building 242 or 249. Identifying the release based upon the building is not acceptable as the buildings contain more than one wastestream. Identification of the source of the release must be as specific as the situation will allow. If possible the source should be identified down to the specific container. The procedures that will be used to identify the source of a spill will vary based upon the type of the release. If the release involves a fire, the source would be identified differently than if the release only involved a spill of a container. The procedures that will be used to identify the different types of incidents must be identified.

4. RIA has failed to fully describe the procedures that will be used to identify the quantity of a release. RIA states that the amount will be determined by reviewing the building Storage Log and the Summary Logs, which are located in a box at the south end of the storage buildings. The amount of the material released must also be as specific as possible. The

amount of the material involved in release should be estimated in gallons, if possible, e.g., two drums were knocked over causing them to rupture, one drum spilled approximately 30 gallons while the other released less than 10 gallons of waste X.

5. RIA has failed to adequately describe the procedures that will be used to identify the areal extent of a release. RIA states that the areal extent will be determined by visual evaluation of the area which the release has impacted, and by the evaluation of weather data. Visual observation is not adequate as all gasses are not visible. In addition, visual observation will not indicate what may be present in the air. An evaluation of each wastestream is needed to determine the type and amount of materials that may be released into the air in the event of a spill or fire involving the wastestream (see deficiency G-4c).

G-4c Assessment: 724.156

1. RIA failed to describe the evaluation that was conducted on the wastestreams which determined that only the eight chemicals identified have potential for direct or indirect heath effects and environmental effects. RIA states that the emergency coordinator (EC) will assess the effect of a release by referring to Appendix F which contains the HAZ-MAT FFHW database. The output for eight chemicals is provided in Appendix F. RIA states that these are the only wastes which when involved in releases, fires, or explosions, have the potential for direct or indirect heath effects and environmental effects.

2. RIA failed to provide the MSDS for perchloroethylene in Appendix F. This is in conflict with what was stated on page 123A.

3. RIA failed to consider the direct and indirect effects of a release, fire or explosion. RIA only evaluated the effects of a spill of waste based upon the information in the MSDS sheets.

4. RIA failed to:

   a. consider the type, amount and variety of waste in the units. The MSDSs do not indicate that the amount of waste will affect the evacuation distances. For certain waste, such as volatile waste, many factors, such as the type of incident, and type and amount of waste involved will affect the response action that would be necessary to address a release, fire or explosion. According to the

Automated Resource for Chemical Hazard Incident Evaluation (ARCHIE) (Version 1.0) computer model the evacuation distance for volatile material spills will be determined based upon among other things (1) the characteristics for the material, e.g., the volatility of the material, etc. (2) the pool size (i.e., the surface area of the spill), (3) the ambient temperature, and (4) weather conditions at the time of the spill.

b. consider the possible hazards associated with a fire or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). This requires an estimation of the types and quantities of gases that may be generated.

c. consider the effects of weather conditions in the event of a release, fire, or explosion.

d. identify the possible hazards to human health or the environment (on-site and off-site) that may result from a release, fire, or explosion.

e. describe how the EC will determine if a release, fire or explosion could threaten human health or the environment outside of the facility. This would include identification of (1) the type of information and criteria the EC would use in arriving at such a determination and (2) an estimation of the time it would take to make such a determination and compare that to the time it would take material resulting from a release, fire, or explosion to travel off-site.

f. describe how the EC will determine if evacuation of local (on-site and off-site) areas may be advisable. As in e. above, this would include identification of (1) the type of information and criteria the EC would use in arriving at such a determination and (2) an estimation of the time it would take to make such a determination and compare that to the time it would take material resulting from a release, fire, or explosion to travel off-site.

G-4d Control Procedures: 724.152

1. RIA has failed to adequately describe the control procedures that will be used to respond to a fire, explosion, or release. This information must be provided for each wastestream and for each type of incident, i.e.,

fire, explosion, or spill. One or more generalized response procedures may be developed, if RIA can demonstrate, that based upon the evaluation of all wastestreams, one or more response procedures are adequate. The response procedures shall also include:

a. a description of the PPE to be used.

b. a description of the steps that will be taken to minimize the impact of the incident on human health and the environment.

G-4i Container Spills and Leakage: 724.152, 724.271

1. RIA failed to adequately describe the procedures and equipment that will be used to overpack leaking containers. The description shall include: (1) the equipment that will be used to collect spilled waste within the secondary containment areas, (2) the PPE that will be used during the cleanup, and (3) other safety precautions that may need to be taken during these operations. This information must be provided for each wastestream. One or more generalized response procedures may be developed, if RIA can demonstrate, that based upon the evaluation of <u>all</u> wastestreams, one or more response procedures are adequate.

2. RIA states that Table 6 and 6A, page 132 list the equipment maintained in the HAZ-MAT vehicle. Page 132 of the submittal does not contains a list the equipment maintained in the HAZ- MAT vehicle. Page 132 is blank with the exception of the revision date and a title, "TABLE 6 - HAZMAT TRUCK CONTENTS".

G-5 Emergency Equipment: 724.152

1. RIA failed to provide a list of the spill control equipment that will be used in the event of a spill.

2. RIA failed to provide the specifications of the spill control equipment that will be used. All of the wastestreams must be evaluated to determine if special spill control equipment is needed for any of the wastestreams to be stored in the units. If different equipment must be used for certain wastestreams RIA must describe how it will be assured that the proper equipment will be used for each wastestream.

3. RIA failed to provide a description, including specifications, of the fire control equipment, i.e., the fire suppression system, that is present in Building 249.

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4. RIA failed to identify the location of the emergency communication equipment.

5. RIA failed to identify the location and specifications of the emergency eye wash and shower located in Building 242. RIA states, the eye wash an shower are located in the small laboratory enclosed in Building 242. Drawing S shows that the laboratory is to be removed from Building 242 during reconstruction of the building. Drawing S does not identify an emergency shower or eye wash.

6. RIA failed to identify the type of PPE that will be needed during an emergency at the storage unit (see comment on deficiency G-4d). The location and specifications of this equipment must also be identified. RIA states that in the event of an emergency, the RIA Fire Department would respond with their PPE as shown in Table 6 and 6A, page 132. Page 132 of the submittal does not contain a list of the equipment maintained in the HAZ-MAT vehicle. Page 132 is blank with the exception of the revision date and a title, TABLE 6 - HAZMAT TRUCK CONTENTS.

7. RIA failed to evaluate the waste to be stored in the storage units to determine if any of the waste pose unusual problems that might require special medical equipment.

8. RIA failed to include the specifications of the decontamination equipment that will be used when responding to incidents involving the storage units. RIA states, decontamination equipment is not kept at the storage unit, and that decontamination will be handled by the HAZ-MAT Team. The contingency plan must identify the type of decontamination equipment that will be needed during an emergency at the storage unit, see comment on deficiency G- 4d.

G-6 Coordination Agreement Requirements: 724.137, 724.152, 724.153

1. RIA failed to obtain coordination agreements from the emergency response groups that may respond in the event of an emergency. Appendix D contains the Reciprocal Fire Protection Agreements. The first sentence of the third paragraph of the agreements indicates that the parties agree to furnish each other, on a voluntary basis, fire fighting equipment and personnel for, "aid in assisting the other party in fire prevention and the protection of life and property from fires and fire fighting..." The mutual aid agreement only addresses fire fighting. This is not a coordination agreement which addresses the responses to incidents at the hazardous waste storage units.

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2. RIA failed to provide documentation of agreements and/or refusals to enter into coordination agreements.

G-7 Evacuation Plan: 724.152

1. RIA failed to describe the signals to be used to initiate the evacuation plan. RIA failed to describe how the people within the evacuation area will be signaled to evacuate along with the evacuation route to be used.

   a. RIA states the EC will initiate the evacuation plan using the signals as identified on page 118A. Page 118A contains a list of emergency phone numbers to be called in the event of an emergency. It does not identify the signals to be used to begin the evacuation of the storage units and the surrounding area.

   b. Page 138, 4th paragraph, RIA states, the Fire Marshal would signal evacuation of buildings by activating the existing building alarm system in place at this time. RIA failed to describe the alarm system.

   c. The evacuation plan addresses four evacuation scenarios winds from the north, south, east, and west with winds at 5 mph and evacuation distances of 300 and 1000 feet.

      1. Scenario 1 (b): RIA states personnel who have vehicles parked in Lot 2H will be told they cannot remove their vehicles and to exit on foot via Station 16 Building 209. RIA failed to describe how personnel will be informed of this.

      2. RIA failed to identify the evacuation routes of the people within the area to be evacuated.

2. RIA failed to justify the use of only four evacuation scenarios.

H. Personnel Training: 703.183, 724.116

H-1e Training for Emergency Response: 724.116, 724.156

1. RIA has failed to demonstrate that the following are included in the training program:

   a. Procedures for using, preparing, inspecting, and replacing facility emergency equipment within Buildings 242 and 249.

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

b. Coordination with local officials to effectively evacuate local areas in the event of an emergency.

J. OTHER FEDERAL LAWS: 703.183

1. RIA failed to identify the basis for the need not to request review from the Federal offices for the Clean Air Act and the Clean Water Act. RIA states that the Agency advised RIA that it was not necessary for RIA to request review from the Federal offices for the Clean Air Act and the Clean Water Act.

KL:sf/sp/9992Z,1-19

Part B Files

USEPA

DEPARTMENT OF THE ARMY
ROCK ISLAND ARSENAL
ROCK ISLAND, ILLINOIS 61299-5000

August 27, 1992

REPLY TO
ATTENTION OF

SMCRI-CO

IL5 210 021 833

RECEIVED
AUG 31 1992
IEPA-DLPC

Mr. Lawrence W. Eastep
Illinois Environmental Protection Agency
Division of Land Pollution Control -- #24
Permit Section
2200 Churchill Road
Springfield, Illinois 62794-9276

Dear Mr. Eastep:

The purpose of this letter is to provide the Illinois Environmental Protection Agency with the Rock Island Arsenal's (RIA) comments to the Agency's July 13, 1992 Notice of Intent to Deny the RIA Resource Conservation and Recovery Act (RCRA) Part B Permit Application for a Hazardous Waste Container Storage Unit.

The RIA's comments are being submitted in two packages. In the first package are located the revisions to correct the deficiencies to the RCRA Part B Permit Application submitted to the Agency on December 12, 1991. Every deficiency identified by the Agency has been corrected and are to be found on pages which are to be inserted into the December 12, 1991 submission for the corresponding pages. Each new page has the words "revised, August 28, 1992" in the upper right hand corner and should the revision cause an additional page, the pagination reflects this by having each succeeding page number to bear an alphabetical suffix. The second package contains the responses to each individual deficiency.

For further information, please contact the Environmental Coordinator for the Rock Island Arsenal at (309) 782-7855 or 782-7907 or write to:

Commander
Rock Island Arsenal
ATTN: SMCRI-SEM (Environmental Coordinator)
Rock Island, Illinois 61299-5000

Sincerely,

for Terry L. Nienhouse
Colonel, U.S. Army
Commanding

MAJ, OD
Acting Commander

Enclosures

RI-31

B-122

Attachment A
Reasons for Denial of
the RCRA Part B Permit for
Rock Island Arsenal
Part B Log No. B-122
LPC No. 16181300I
IL5210021833

July, 1992

Rock Island Arsenal (RIA) initially submitted a RCRA Part B permit application to store on-site generated hazardous waste in containers in an existing building, Building 242. RIA's most recent submittal included an additional container storage building (Building 249) that was not included in the previous submittals. RIA submitted their initial application in October of 1988 and since that time the Agency has reviewed the application and given RIA the opportunity to correct the deficiencies in the application four (4) times (two (2) completeness and (2) technical reviews). The fifth review of the application revealed that a large number of the deficiencies still existed. The extent of these deficiencies was such that issuance of the permit with a compliance schedule or some other mechanism for obtaining the necessary information would not be feasible.

The following deficiencies were found during the third technical review of the RCRA Part B permit application submitted for the above-referenced facility and are the reasons for denial of the subject application (All regulatory references are to 35 Ill. Adm. Code, Subtitle G: Waste Disposal):

A. Part A Application: 702.123, 702.126(a), and (d), 703.181

1. Rock Island Arsenal (RIA) failed to complete the following items of the Part A Application:

   - Form 1:

     Items VIII. C. through H.

     Item IX.

   - Form 3:

     Item II. A.

     Items IV. C. and D.

     Item VIII.

2. The following errors have been identified in the Part A Application:

- Form 1:

  Items II. C. and D. have been marked "N/A", rather than yes or no as required.

  Item X indicates that the facility has no other environmental permits. The Agency's RCRA Facility Assessment and Section L of the application indicates that the facility has Air Pollution Control Permits.

- Form 3:

  Item III. B. indicates a design capacity of 27,000 gallons for drum storage. Section D-1a(2) indicates a design capacity of only 16,500 gallons. The Part A Application must be consistent with the Part B Application.

  Item V. indicates that Section 3 contains the facility drawings. Section 3 could not be located in the application.

RIA RESPONSE: An amended Part A application is provided. All deficiencies noted have been corrected.

B. FACILITY DESCRIPTION

B-1 General Description: 703.183(a)

RIA identified the waste handled by the facility in Table 1 (pages 13 to 17) of this Section. This table indicates that 24 drums of waste from the Quad City Airport and "Range Dust" from Savanna were managed at the facility. No where else in the application is this discussed. The application failed to describe in detail how such waste is managed at the facility.

RIA RESPONSE: The corrections have been made and are found on pages 13 and 13A.

B-2 Topographic Map: 703.183(s), 703.185(c), 703.185(d), 724.195, 724.197

B-2a General Map Requirements: 703.183(s)

RIA failed to identify the location of the proposed Hazardous Waste Unit (Building 249) on the maps.

RIA failed to identify the scale of Map L.

RIA RESPONSE: The location of Building 249 has been added to all maps and the scale was added to Map L.

B-4 Traffic Information: 703.183(j)

RIA failed to provide traffic related information for the entire facility. Adequate traffic information was provided for the area within 1,000 feet of the storage units but not for the entire facility. Adequate traffic information, excluding the area within 1,000 feet of Building 242, was provided in RIA's August 30, 1990 submittal as subsequently revised by RIA's March 15, 1991 revision but was not included in the latest revision of the application.

RIA RESPONSE: The corrections have been made and are found on pages 24, 32, 32A and 33.

C. WASTE CHARACTERISTICS

C-1 Chemical and Physical Analyses: 703.183(b), 724.113(a)

For each hazardous waste to be stored at the facility, the application failed to adequately describe the waste, the hazard characteristics, and the basis for hazard designation.

RIA failed to provide a copy of the laboratory waste analyses report, on laboratory letterhead and signed by a responsible party of the lab, that details the chemical and physical properties of representative samples of each waste stream to be stored in the area which is the subject of this application. Specifically, each waste should have been analyzed for all of its possible hazardous constituents and the parameters set forth in the Agency's Instructions (for) Special Waste Stream Application revised May 1, 1991 (see Attachment 2). Appendix A of the March 1991 submission does not meet the above requirements.

The only exceptions to the need for laboratory waste analysis reports are (1) off-specification material that has not been used in any process or (2) wastes which can be characterized by identifying the composition of the waste using generator knowledge, an adequate MSDS, adequate experience, and knowledge of the generating process. RIA failed to provide copies of either MSDS (Material Safety Data Sheets) or other published information for such waste.

The application failed to contain the following information regarding the various waste streams to be managed at the facility:

1. Chemical Grinding Compound - The waste profile sheet indicates that this is an unused material. An MSDS is provided. However, a "request for test and laboratory results" is also attached which indicates that this is an unknown material. The analyses that were conducted are not identified. Since the source of the material was unknown, a detailed chemical analysis should have been performed.

2. Iron Citrate Derust w/oil and 1,1,1 TCEA - No waste analysis was provided. RIA's determination regarding the classification of the waste was made based on user knowledge, however, documentation supporting this determination was not provided.

3. Alkaline Derust Sludge - The waste profile sheet identifies the material as hazardous due to corrosivity (D002) and lead (D008). However, the waste composition section indicates that cadmium and chromium are present at levels above their regulatory limits defined in

35 IAC 721.124. RIA failed to provide laboratory or other supporting data regarding the classification of this waste. Therefore, it appears as though this waste may also be hazardous due to cadmium and chromium.

4. Scintillation Fluid - RIA indicates that the waste stream is identified based upon user knowledge. RIA failed to provide laboratory or other supporting data regarding the classification of this waste.

5. Lead anodes from chromium tanks - Wastestream identified based upon user knowledge. RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste.

6. Waste water treatment sludge - This waste is identified as F006 which is listed for cadmium and chromium. The analytical results also indicate that it may be hazardous due to lead (D008).

7. Spills from Plating Shop - This waste has been classified as F006. This waste does not appear to be a wastewater treatment sludge, and therefore should not be classified as F006. This waste appears to be characteristically hazardous due to cadmium (D006), chromium (D007) and lead (D008). If the material is F006 waste, it must also be classified as D008. The waste was only analyzed for cadmium, chromium, and lead. RIA failed to provide justification for this limited analysis.

8. Sludge, oil, and water from heat treating quench tanks - Waste identified as hazardous due to chromium (D007) and lead (D008). No justification for this limited analysis was provided. If cyanides are used in the process, this waste would be classified as F010 waste. F010 is listed on the Part A Application, however, none of the wastestreams are identified as such.

9. Plating Waste - Material classified based upon user knowledge. RIA failed to provide laboratory or other documentation regarding the classification of this waste.

10. Plating waste scrubber #1 solids - RIA failed to provide justification for the limited analysis performed.

11. Chromium Plating Sludge - Waste is identified as (D007) chromium waste, however, analytical results indicate that total cadmium, and lead levels are above the regulatory limit. This waste may be hazardous due to lead and cadmium. RIA failed to

provide justification for the limited analysis performed.

12. Waste Paint with Naphtha - Waste is identified as hazardous due to D001 and D007 based on user knowledge. RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste.

13. CARC Paint with Solvent. Material identified based on user knowledge. RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste.

14. Traffic Paint - Same deficiency as for No. 13.

15. Waste Paint - Material is identified as hazardous F002, F005, and D001 based on user knowledge. Paint waste is often also hazardous due to metals. RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste.

16. Filter waste, air filter from paint booths. Waste determined based on user knowledge. RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste.

17. Paint Waste Solids - Waste is identified as hazardous due to chromium (D007), cadmium (D006) and lead (D008). Analytical results only provided for chromium, cadmium, and lead. RIA failed to provide justification for this limited analysis.

18. Spent Non-Halogenated Solvents generated from paint thinning. Waste identified as F003 only. Metals from the paint may cause the waste to be hazardous due to metals. The flash point of this material is appears to be incorrectly identified as 3100 F. RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste.

19. Paint Stripper/Paint Sludge. This waste identified as hazardous F001, F003, F004, D007, and D008 based on user knowledge. RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste. Other metals such as mercury or arsenic may also be present in paint related waste.

20. Spent halogenated solvent from paint stripping, identified as F002. Metals from paint may also be present in the waste. RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste.

21. Waste identified in waste profiles as being generated at the Quad City Airport cannot be accepted by RIA. RIA does not have State permits to accept waste from off-site nor does the Part B address the acceptance of waste from off-site.

22. Contaminated oil with TCEA waste is identified as FØØ1. The flash point for this material is reported to be from 141 to 199 F. RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste.

23. Contaminated Waste Oil - Classified based on user knowledge. RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste.

24. Stanisol - Classified based on user knowledge. Same deficiency as for 23.

25. Corrosion Preventing Compound - Same deficiency as 23.

26. Carburizing Compound - Waste profile sheet indicates that a waste analysis is attached, however, no analysis is attached. A MSDS is attached, however, the MSDS is not legible.

27. Waste water from silver recovery solution - Laboratory data is only provided for metals. RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste.

28. Blankrola - Mixture of solvent and ink. Classification based on MSDS. However, a MSDS is only provided for the solvent portion of the material and not for the ink. RIA failed to provide a MSDS or other supporting data for the ink.

29. Degreaser Still Sludge - Classification based on user knowledge. RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste.

3Ø. Mold Release Spray Waste - RIA failed to provide laboratory or other supporting documentation regarding the classification of this waste.

31. Area 1 sump waste - Same deficiency as for 3Ø.

32. Wood and Chromium Cleanup Waste - Same deficiency as for 3Ø.

RIA RESPONSE: All waste streams at RIA are supported by a waste profile and a complete TCLP or by a waste profile and a user knowledge paper which includes the waste stream name, the EPA codes, the processes, and materials used in the waste, the MSDS for the materials, etc. Any references to one-time only wastes have been eliminated for the application. The waste streams listed are a "snap-shot" of the contents of buildings 242 and 249. See pages 45, 46 and 47.

C-2 **Waste Analysis Plan:** 703.183(c), 724.113(b) and (c)

C-2a **Parameters and Rationale:** 724.113(b)(1)

1. RIA indicates that each waste will be analyzed for all possible hazardous constituents and the parameters are set forth in the Agency's special wastestream instructions. The parameters are identified in Table 10. Table 10 identifies "metals" in general. However, the application failed to identify the specific metals that will be included in the analysis must be identified.

2. RIA failed to identify the following hazardous constituents as identified in Appendix G (35 IAC Part 721) in the parameter list (Table 10) which are associated with F001-F006 wastestreams:

   - Methylene Chloride
   - 1,1,1-Trichloroethane
   - 1,1,2-Trichloroethane
   - 1,1,2-Trichloro-1,2,2-Trifluroethane
   - Ortho-Dichlorobenzene
   - Trichloro Fluoromethane
   - Toluene
   - Methyl Ethyl Ketone
   - Carbon Disulfide
   - Isobutanol
   - 2-Ethoxyethanol
   - 2-Nitropropane
   - Xylene
   - Acetone
   - Methyl Isobutyl Ketone
   - Methanol
   - n-Butyl Alcohol
   - Cyclohexanone
   - Ethyl Acetate
   - Ethyl Benzene
   - Nickel (F006 waste)

3. Section C-2, page 58, indicates that user knowledge may be used in place of all or some chemical analysis. The application does not define "user knowledge".

RIA RESPONSE: Table 10 has been updated to reflect the methods for metals and the methods for the F001-F006 contaminants. The definition of "user knowledge" is located in Section C-2. Corrections are found on pages 60 and 60A.

C-2b **Test Methods:** 724.113(b)(2)

Table 10 indicates that the test method for metals is the 7000 series. RIA failed to identify the specific metal and its test method. Several of the metals have more than one test method in the 7000 series.

RIA RESPONSE: Table 10 has been updated to reflect the methods for metals. Table 10 is found on pages 60 and 60A.

C-2c **Sampling Methods:** 724,113(b)(3), 40 CFR 261 - Appendix I

RIA failed to 1) document that the chosen sampling method is appropriate for the type and nature of the waste; 2) identify the construction material of the sampler; and 3) evaluate the compatibility of the equipment with the wastestream to be sampled.

RIA RESPONSE: Table 11A has been added to satisfy the failures as noted above. Table 11A is found on page 62A.

C-2d **Frequency of Analyses:** 724.113(b)(4)

Paragraph 3 of this section indicates "the physical characteristics outlined in Table 10 will be determined by visual observation." None of the parameters identified in Table 10 can be determined by visual inspection. The application failed to identify what the phrase "physical characteristics" refers to.

RIA RESPONSE: The definition for physical characteristics has been identified in Section C-2b. See page 59.

C-2f **Additional Requirements for Ignitable, Reactive or Incompatible Wastes:** 724.113(b)(6), 724.117

RIA failed to classify each wastestream for compatibility pursuant to (1) 40 CFR 264 Appendix V, (2) pages B9A-9F of USEPA OSWER Document #9938.4 and (3) the procedures set forth in "A Method for Determining the Compatibility of Hazardous Wastes" (EPA 600/12-80-076, April 1980). This information is necessary to ensure that incompatible wastes are properly segregated.

RIA RESPONSE: Tables 8A and 8B are used by RIA to classify each waste stream for compatibility per referenced documents above. The compatibility for each particular waste stream are found in Table 7 and 8. The text discussing the subject is in Section C-2f. See pages 55, 55A and 55B.

D. PROCESS INFORMATION

D-1 Containers

D-1a Containers with Free Liquids

D-1a(1) **Description of Containers:** 724.271, 724.272

Page 68 of the application indicates that 20 gallon polyethylene drums will be used for the off-specification materials. RIA failed to provide DOT specifications for these containers.

RIA RESPONSE: The table listing DOT specification containers provides information describing the 20 gal polyethylene lab-pack containers which are employed at RIA. All references to off-specification materials are removed from this application. See page 69.

D-1a(2) **Container Management Practices:** 724.273

1. RIA failed to provide a detailed description of how the off-spec material and leaking containers will be overpacked, including a description of where the material will be overpacked, any special safety equipment that may be needed, modification of the operating log, etc.

RIA RESPONSE: All references to off-specification materials are removed from this application. The modifications to the operating log are included in Section D-1a(2)(a) for a leaking

container. The Fire Department HAZ-MAT Team will respond for leaking containers using the appropriate spill response and protective equipment. See page 71.

2. RIA indicates that containers will remain closed, except for sampling or adding or removing waste. RIA failed to describe how waste will be added or removed from containers.

RIA RESPONSE: All containers will be returned to the generators site for sampling, adding or removing waste, Section D-1a(2)(a). See page 72.

3. RIA indicates that the contents of a leaking container will be transferred to another drum, or the container will be overpacked. However, the application failed to describe how this activity will be done.

RIA RESPONSE: Section D-1a(2)(a) identifies the method for overpacking any leaking drums and placing them into salvage drums. See page 74.

4. RIA indicates that drums will be moved via forklift. RIA failed to specify the personnel protective equipment that will be used during these operations.

RIA RESPONSE: The normal operations require level D personal protective equipment, Section D-1a(2)(d). However, any leaking containers will be treated as a spill and the Fire Department HAZ-MAT Team will respond, Section D-1a(2)(a). See pages 74 and 75.

5. RIA failed to identify the aisle spacing that will be maintained within the storage areas.

RIA RESPONSE: The aisle spacings and placement of the drums in each of the storage unit buildings are shown on Map S and Map T and are described in Section D-1a(3). See page 74.

6. Page 96 of the application indicates that building 249 will be unheated. RIA failed to describe how the waste to be stored in Building 249 has been evaluated to determine the effect, if any, that cold weather will have on the waste, e.g., could the waste freeze causing the possible rupture of containers.

RIA RESPONSE: The free liquid hazardous flammable wastes which will be stored in unheated building 249, will not freeze, nor expand, nor cause their containers to rupture. With the exception of water, for the most part, upon cooling chemical liquids will contract when transforming to the solid state. Corrections are made to D. See page 96.

D-1a(3) Secondary Containment System Design and Operation: 703.201(a)(1), 724.275(a) and (d)

1. RIA failed to provide design drawings of the proposed Building 249 and the proposed modifications to Building 242. Profile drawings of Building 249 have not been provided.

2. Map N is identified as "Building 242 Floor Slab Revisions," however, it does not agree with the modifications shown on Map S. Adequate secondary containment is not provided with the modifications shown on Map N. Maps S and T contain profile and plan views of Building 242 and a plan view of Building 249, however, these drawings are not design drawings.

3. RIA failed to identify (1) the arrangement of the containers (plan and profile) and (2) the locations of incompatible waste on the drawings.

4. The 4 foot concrete block partitions are not adequate to prevent 55-gallon contains from falling and/or spilling into adjacent containment areas if they are stacked two (2) high.

RIA RESPONSE: The complete design drawings for both building 242 and 249 are in Appendix F. The information on Maps M, N, and O is in the design package history. These Maps are replaced with the Facility Storm Drainage, West, the Facility Storm Drainage, East, and the Facility Traffic Plan. Maps S and T now identify the compatibility zones and placement of each waste stream for buildings 242 and 249. They also show the plan and profile of the containers. The walls have been redesigned and are shown in Appendix F. See pages 74, 75 and 76.

D-1a(3)(a) Requirement for the Base or Liner to Contain Liquids: 724.275(b)(1)

1. RIA failed to provide a demonstration that the epoxy coating and joint sealing materials are compatible with the waste to be stored in the unit.

2. RIA failed to describe the evaluation which was conducted regarding the compatibility of the waste and the liner. Waste which contains component(s) which are rated as "OS" in the manufacturer's literature are not considered to be compatible with the coating. This is due to the fact that the manufacturer's literature indicates that an "OS" rating is "suitable for use where" occasional spillages occurs, when followed by immediate water flushing. Since the storage area is only required to be inspected on a weekly basis, released material could be in contact with the liner for up to a week, and therefore, immediate water flushing cannot be assumed.

3. Appendix B states that 1) Maps S and T identify the base designs and the construction requirements; 2) epoxy coated reinforcing steel will be used; 3) concrete will consist of bank run aggregates, natural sand, Type II cement, and potable water; and 4) the base will be designed and constructed in accordance with applicable ACI and PCA criteria. The design information provided is not adequate. Adequate information on the base design of the proposed Building 249, the proposed modifications to Building 242, and the existing structure of Building 242 must include:

   a. Construction drawings:

      - Plan and Section views of the design
      - Type and location of steel reinforcing
      - Location of construction joints
      - Details of construction joint design including how they will be sealed, e.g., details of water stops to be used.
      - Appropriate construction details
      - Plan and profile views of the base design

   b. As build drawings including above information, as available, for existing structure.

c. Design specifications of construction material, as necessary, to assure structural adequacy of the base.

d. Site specific geotechnical information on which the base and footings were designed.

e. Engineering calculations used in the structural design of Building 249 and in the evaluation of Building 242 and its proposed modifications.

Please note, the above information must be certified and sealed by an Illinois registered professional engineer.

RIA RESPONSE: The design drawings for both building 242 and 249 are shown on Appendix F. It also includes a design analysis package, Volume 1, which discusses the selection of the liner.

4. The application failed to contain the above information for the steel containment cabinet, since they will each be outside the secondary containment system within the area and must thus have self-contained secondary containment systems. At a minimum, the following information on the cabinets must be provided:

a. An evaluation of the epoxy coating compatibility as described above for the coating to be applied to the concrete floor of the buildings.

RIA RESPONSE: THe cabinets will have a polyethylene liner to insure compatibility.

b. Design specifications on the cabinets which identify the containment systems capacities.

RIA RESPONSE: The specification for the cabinets are in Appendix G. The calculations for the capacities are discussed in Section D-1a(3)(c).

D-1a(3)(b) Containment System Drainage: 703.201(a)(2), 724.275(b)(2)

RIA failed to identify the containment system drainage for the steel containment cabinets. The base of the cabinets must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids.

RIA RESPONSE: The drainage of the containment systems for buildings 242 and 249 have been rewritten to reflect the design package. The drainage description for the cabinets was added, section D-1a(3)(b).

D-1a(3)(c) Containment System Capacity: 703.201(a)(3), 724.275(b)(3)

1. RIA failed to provide calculations which demonstrate that the containment system of the cabinets will have sufficient capacity to contain at least 10 percent of the volume of the containers or the volume of the largest container, whichever is greater. This demonstration must discuss the volume of the largest container, total volume of containers, containment structure capacity, and volume displaced by containers and other structures in the containment system.

2. RIA indicates on Page 74 that the containment volume for each bay in Building 242 is 294 gallons. This is based on a slope of one inch per foot over 11.5 ft. The bays are 11.5 ft by 17.67 ft. However, based on these dimensions, the containment volume appears to be 728 gallons, minus the volume displaced by containers and other structures, e.g., pallets, in the system.

   a. The text referenced above does not agree with Map S. Map S shows the secondary containment bay to be 12.5 by 17.67 ft. with a slope of 8% for 2 ft. and 2% for 10.5 ft. Based on these dimensions, the containment volume appears to be 388 gallons, minus the volume displaced by containers and other structures in the system.

3. RIA indicates on Pages 75 and 76 that the containment volume of each bay for Building 249 is 270 gallons based on bays of 13.5 Square ft. by 13.67 ft. and a slope of 11 inches per 13.5 ft. However, based on these dimensions, the containment volume appears to be 632 gallons, minus the volume displaced by containers and other structures in the system.

a. The dimensions referenced above do not agree with the design shown on Map T. Map T shows the bays to be 13.67 ft. by 14.5 ft. with a slope of 2% for 2 ft. and 2% for 12.5 ft. Based on these figures, the containment volume appears to be 380 gallon, minus the volume displaced by containers and other structures in the system.

4. RIA failed to identify which containment systems will be used, i.e., the description of the systems in the narrative does not agree with the drawings of these systems. In addition, the calculations provided do not discuss the volume displaced by containers and other structures, e.g., pallets in the containment system.

RIA RESPONSE: The containment system capacity is discussed in the design analysis package, Volume 1, for buildings 242 and 249 are in Appendix F. The capacity of the cabinets has been updated, Section D-1a(3)(c). See page 77.

F. PROCEDURES TO PREVENT HAZARDS

F-2 Inspection Schedule: 703.183(e), 724.115

F-2a(1) Types of Problems: 724.115(b)(3)

1. Table 12 indicates that each time the storage area is opened the fire extinguishers, eyewash/safety shower, and emergency clothing will be inspected for their performance. RIA failed to describe how the performance check will be done for each of these items.

2. RIA failed to include the "air packs" (SCBAs) in the performance check inspection. RIA indicates that the air packs are checked for expiration date only. RIA failed to demonstrate that inspection of the expiration date alone is conservative enough to assure that age will not cause deterioration of the equipment (e.g., rubber components may crack with age, become inflexible).

3. RIA failed to include an inspection log sheet for the proposed Building 249.

4. RIA failed to demonstrate that the storage area will be inspected weekly for leaks, spills, and for deterioration caused by corrosion. RIA indicates that weekly inspections will be conducted as shown in Figure 6. Figure 6 is an MSDS for No. 2 fuel oil.

RIA RESPONSE: The corrections have been made and are found on pages 85 and 85A.

F-3b Aisle Space Requirement: 724.135

1. RIA failed to demonstrate that the facility maintains sufficient aisle space to allow the unobstructed movement of personnel, fire protection equipment, or spill control equipment to any area of facility operation in an emergency. As required in Section D-1a(3)(a), the arrangement of the containers must be shown in order to evaluate the aisle spacing, this includes the aisle spacing for the cabinets.

2. RIA failed to identify the aisle spacing that will be maintained inside the steel containment cabinets. This spacing must meet the requirements of 35 Ill. Code 724.135.

RIA RESPONSE: The corrections have been made and are found on page 91.

F-4 Preventive Procedures, Structures and Equipment: 703.183(h)

F-4a Unloading Operations: 703.183(h)(1)

RIA failed to provide a description of the safety equipment, including the personal protective equipment, that will be used during loading and unloading operations.

RIA RESPONSE: The corrections have been made and are found on page 92.

F-4e Personal Protective Equipment: 703.183(h)(5)

RIA failed to demonstrate that the personal protective equipment chosen is adequate. Specifically:

1. Personal Protection Code (PPC) 3 and 9 do not identify any equipment to protect the eyes. Eye protection must be provided for all wastestreams, unless it can be demonstrated that it is not necessary.

2. Table 9 identifies generic non-permeable gloves, body protection, and foot protection. The application failed to 1) identify the type(s) of material of which

these are made and 2) demonstrate that this equipment will adequately protect workers.

3. Table 9 also identifies respirators as being required. the application failed to 1) identify what type of respirator is required for each wastestream and 2) demonstrate that it is adequate for that wastestream.

RIA RESPONSE: The corrections have been made and are found on page 93.

F-5 Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes

F-5a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste: 703.183(i), 724.117(a), 724.131

Table 7, which identifies waste to be stored in Building 242, identifies the following ignitable waste as being proposed for storage in Building 242:

- Liquid scintillation fluid
- Waste paint with Naphtha
- CARC paint w/solvents
- Traffic paint
- Waste paint
- Non-halogenated solvents
- Paint stripper
- Halogenated solvents
- Waste oil with jet fuel
- Waste oil
- Waste oil with solvent
- Corrosion preventing compound
- Blankrola

RIA failed to describe the heating system in Building 242, and identify what precautions are taken to assure that any flames or heat generated from the system will not cause a fire or reaction in the storage unit.

RIA RESPONSE: The corrections have been made and are found on page 96.

F-5c Management of Ignitable or Reactive Waste in Containers: 703.201(c), 724.276

RIA failed to separate halogenated solvents from ignitable waste. In addition, RIA failed to demonstrate in the application that a fire involving the halogenated solvents, e.g., F001 and F002 waste, will not affect areas outside of the facility.

RIA RESPONSE: The corrections have been made and are found on page 97.

F-5d Management of Incompatible Wastes in Containers: 703.201(d), 724.277

1. RIA failed to classify the wastestreams for compatibility pursuant to (1) pages B9A-B9F of OSWER Document # 9938.4 and (2) the procedures set forth in "a method for determining the compatibility of hazardous wastes" (EPA 600/12-80-76, April 1980).

2. RIA failed to demonstrate that all waste which may be stored within a given secondary containment area (SCA) are compatible with each other, if two or more waste-streams may be stored within the same SCA. RIA failed to include the wastestream names, their EPA identification numbers, hazard classification and their compatibility classifications (identified in accordance with the documents specified above).

RIA RESPONSE: Tables 8A and 8B are used by RIA to classify each waste stream for compatibility per referenced documents above. The compatibility for each particular waste stream are found in Table 7 and 8. The text discussing the subject is in Section C-2f, refer to pages 97 and 97A.

G. CONTINGENCY PLAN: 703.183(g), 724.137, 724.150 through 724.156, 724.152(b)

G-1 General Information

RIA failed to identify the location of the proposed hazardous waste storage unit, Building 249, on the site plan (Maps A, H, and Q).

RIA RESPONSE: The corrections have been made and are found on page 102.

G-2 Emergency Coordinators: 724.152(d), 724.155

1. RIA failed to demonstrate that at lease one Emergency Coordinator (EC) will always be present at the facility or on call, i.e., able to reach the facility in a short period of time. RIA failed to define the length of time that it will take for the EC to reach the facility.

2. RIA failed to identify names, addresses, office and home phone numbers, and duties of alternate EC(s).

3. RIA failed to provide a statement authorizing the coordinator, including the alternative EC(s), to commit all necessary resources to the plan. The present authorization statement only authorizes the Environmental Coordinator, i.e., Dr. Foss, to commit the necessary resources to the plan. The EC must be authorized to immediately, without approval from other persons, commit necessary resources from both on and off-site to implement the contingency plan. This authorization statement must be signed by persons meeting the signatory requirements set forth in 35 Ill. Adm. Code 702.126.

RIA RESPONSE: The corrections have been made and are found on pages 112, 113, 114, 115, 116 and 117.

G-3 Implementation: 724.151(b), 724.152(a), 724.156(d)

RIA indicates that the contingency plan will be implemented if the release is greater than the reportable quantity for that waste. RIA has failed to demonstrate that a release of waste that is less than the reportable quantity will not affect areas outside of the facility. The contingency plan must be implemented for a spill, fire, explosion or release

of any size unless it can be demonstrated in the application that a specific release will not affect areas outside of the unit.

RIA RESPONSE: The corrections have been made and are found on pages 117 and 117A.

G-4 Emergency Response Procedures: 724.156

RIA failed to conduct an evaluation of the facility's hazardous waste management activities, including potential emergency situations (release, fire or explosion) and the consequences of these emergency situations. At a minimum, the information which should have been evaluated in developing the contingency plan includes:

1. The type, amount and variety of waste managed in each hazardous waste management unit (HWMU) at the facility;

2. The location of the waste within each HWMU and within the facility overall;

3. Waste handling practices;

4. Possible hazards which may result from a release, fire or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). This requires an estimation of the types and quantities of gases that can be generated. The evaluation of these hazards may require the use of commercially available models to simulate what may happen in the event of an emergency.

5. The effects of weather conditions in the event of a release, fire or explosion;

6. The extent of the area (on-site and off-site) impacted by a release, fire or explosion. This may require use of commercially available models;

7. The information required by the emergency coordinator (EC) to determine if a release, fire or explosion could threaten human health or the environment outside the facility.

    a. The information and criteria to be used by the EC in making this determination must be provided in the

plan. Simply stating that the EC will make a determination at the time of the emergency is not adequate.

b. The time required to make such a determination should be compared with the time it takes for the emergency to have an off-site impact. This will give some indication of the "reaction time" available in the event of an emergency.

8. The information required by the EC to determine if evacuation of local areas is advisable.

   a. The information and criteria to be used by the EC in making this determination must be provided in the plan. Simply stating that the EC will make a determination at the time of the emergency is not adequate.

   b. The time required to make such a determination should be compared with the time it takes for the emergency to have an off-site impact. This will give some indication of the "reaction time" available in the event of an emergency.

9. The person the EC should notify if evacuation of the local area is determined to be advisable.

10. The capabilities of the on-site emergency response system, the capabilities of the off-site emergency entities (training, equipment, availability, etc.), and the agreements/arrangements made with state and local emergency response entities.

RIA RESPONSE: The corrections have been made and are found on pages 118, 118A, 119, 119A, 120 and 121.

G-4a Notification: 724.156(a)

RIA failed to describe the methodology for immediate notification of:

- The IEPA Emergency Response Unit
- The Illinois Emergency Services and Disaster Agency
- All local police and fire departments, hospitals, and emergency response teams identified in Section G-6.

RIA RESPONSE: The corrections have been made and are found on pages 122, 122A, 122B and 123.

G-4b Identification of Hazardous Materials: 724.156(b)

RIA has failed to describe procedures to identify the character, exact source, amount and areal extent of any released material involved in the emergency.

RIA RESPONSE: The corrections have been made and are found on pages 123 and 123A.

G-4c Assessment: 724.156(c) and (d)

RIA failed to assess (1) the direct and indirect health and/or environmental effects of the emergency and (2) the extent of the area which will be impacted by the emergency. Due to the fact that there will be limited time to properly assess hazards during an emergency, the contingency plan must describe in detail the information and criteria the EC will use in assessing (1) effects on human health and the environment and (2) the area which may be impacted by the emergency. Specifically, the contingency plan must describe the hazards associated with releases and fires involving the various hazardous wastes managed at the facility and the area impacts of such emergencies. Such information was not contained in the application.

Page 123 indicates that there are not structures housing personnel within 300 feet of the storage units. There are structures within 300 feet where personnel may be present, namely, Buildings 206, 237, 239, and 244.

RIA RESPONSE: The corrections have been made and are found on pages 123A, 123B, 123C, 123D, 123E, 123F, 123G and 124.

G-4d Control Procedures: 724.152(a)

RIA failed to demonstrate that the type of respiratory protection and protective garments to be used in the cleanup or spills is adequate for all types of waste stored in the unit.

RIA RESPONSE: The corrections have been made and are found on pages 125, 126, 127 and 128.

G-4i Container Spills and Leakage: 724.152, 724.271

RIA has failed to identify the procedures and equipment that will be used to overpack leaking containers.

RIA RESPONSE: The corrections have been made and are found on pages 129, 130 and 133.

G-5 Emergency Equipment: 724.152(e)

RIA failed to describe the location of the emergency equipment for proposed Building 249.

RIA RESPONSE: The corrections have been made and are found on pages 130 and 132.

G-6 Coordination Agreement Requirements: 724.137, 724.152(c), 724.153(b)

RIA failed to:

a. Make arrangements to familiarize police, fire departments and emergency response teams with the lay-out of the facility, properties of hazardous wastes handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility and possible evacuation routes;

b. Establish agreements designating primary emergency authority to a specific police and a specific fire department, where more than one police and fire department might respond to an emergency. Agreements should also be made with the other surrounding police and fire departments to provide support to the primary emergency authorities.

c. Establish agreements with state emergency response teams, emergency response contractors and equipment suppliers;

d. Make arrangements to familiarize local hospitals with the properties of the hazardous waste handled at the

facility and the types of injuries or illnesses which could result from fires, explosions or releases at the facility.

RIA RESPONSE: The corrections have been made and are found on pages 134, 135, 135A, 135B, 136, 173, 137A, 137B, 137D, 137E, 137F, 137G and 137H.

G-7 Evacuation Plan: 724.152(f)

Pages 123, 125, and 127 indicate that an area of at least 300 feet around the storage units will be evacuated. This would require evacuation of Buildings 206, 237, 239, and 244 (see Map D). RIA failed to (1) include Buildings 206, 237, 239, and 244 in the evacuation plan, (2) describe the signal(s) to be used to begin evacuation, and (3) identify the primary and alternate evacuation routes of all structures within the area to be evacuated.

RIA RESPONSE: The corrections have been made and are found on pages 138, 138A, 138B, 138C, 138D, 138E, 138F and 138G.

H. PERSONNEL TRAINING: 703.183(1), 724.116

H-1 Outline of the Training Program: 724.116(a)(1)

H-1a Job Title/Job Description: 724.116(d)(1) and (d)(2)

1. Page 153, RIA indicates the minimum qualifications for the Environmental Coordinator are:

"... Combination of education and experience - Course work equivalent to a major as shown above... Plus appropriate experience or additional education..."

RIA failed to describe what "appropriate experience or additional education" entails, i.e., what would be the minimum "appropriate experience or additional education" that would be acceptable for a person applying for this position.

RIA RESPONSE: The corrections have been made and are found on pages 152, 153, 153A, 153B, 153C, 155, 155A, 155B, 155C, 157, 158, 158A, 158B, 158C, 158D, 158E, 158F, 158G, 159, 159A, 159B, 159C, 159D, 159E, 159F, 160, 160A, 160B, 160C, 160D, 160E, 161, 161A and 161B.

H-1b Training Content, Frequent and Techniques: 724.116(c) and (d)(3)

1. RIA failed to provide a written description of the type and amount of introductory and continuing training that will be given to a person filling the position identified in Section H-1a of the application.

2. RIA failed to describe the frequency and techniques used in the introductory and continuing training, including annual review of the initial training, to be given to each employee.

3. RIA failed to provide an outline of the content of the introductory and continuing training program used in order to satisfy the requirements of 724.116(a)(1). This information was included in RIA's previous application (Section H-1b) dated August 30, 1990 and amended by RIA's March 15, 1991 submittal.

RIA RESPONSE: The corrections have been made and are found on pages 161, 161A and 161B.

H-1e Training for Emergency Response: 724.116(a)(3), 724.156

1. RIA has failed to demonstrate that facility personnel are able to respond effectively to emergencies and are familiar with emergency procedures, emergency equipment, and emergency systems. The training program should include the following:

   a. Procedures for using, inspecting, preparing and replacing facility emergency and monitoring equipment.

   b. Communications or alarm systems.

   c. Response to fires, explosions or releases.

   d. Coordination with local officials to effectively evacuate local areas in the event of an emergency.

2. Under the provisions of 29 CFR 1910 (51 FR 15, 654 December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or

potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experiences supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations. RIA failed to demonstrate that the on-site personnel who may respond to an emergency meet the above requirements.

RIA RESPONSE: The corrections have been made and are found on page 168.

I. CLOSURE AND POST CLOSURE REQUIREMENTS: 703.183(M), 724.210 through 724.220

I-1c Maximum Waste Inventory: 724.212(b)(3)

RIA failed to specify what the maximum waste inventory is. Section I-1c indicates that the maximum inventory is 540, 55-gallon drums (27,000 gallons). Section D-1a(2) indicates that the maximum capacity of the units is only 16,500 gallons.

RIA RESPONSE: The corrections have been made and are found on pages 171 and 171A.

J. OTHER FEDERAL LAWS: 703.183(t)

RIA failed to demonstrate compliance with the requirements of applicable Federal laws such as the Clean Air Act, Clean Water Act, the Wild and Scenic Rivers Act, National Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Management Act, and Fish and Wildlife Coordination Act.

RIA RESPONSE: The corrections have been made and are found on pages 178, 178A, 178B, 178C and 178D.

Illinois Environmental Protection Agency · P.O. Box 19276, Springfield, IL 62794-9276

IEPA NO.: 1618130001
ILD NO.: IL5210021833
NOTICE NO.: PB08-92 DATE: July 14, 1992

PUBLIC NOTICE

The Illinois Environmental Protection Agency (IEPA) and the United States Environmental Protection Agency (U.S.EPA) hereby give notice of intent to deny a joint Resource Conservation and Recovery Act (RCRA) and Hazardous and Solid Waste Amendments (HSWA) permit to Rock Island Arsenal in Rock Island, ILL. The facility's mailing address is Rock Island Arsenal, Attn: SMCRI-SEM (Dr. David Foss) Rock Island, IL. 61299. The Rock Island Arsenal currently stores hazardous waste generated from its manufacturing operations under interim status as provided for in 35 Ill. Adm. Code 725.101(b)

Interested citizens are invited to review copies of the permit application, draft permit decision and related fact sheets at the following locations:

Rock Island Public Library
401 19th Street
Rock Island, IL
309/788-7627

Interested citizens may submit written comments on the permit decision documents during the 45 day comment period. Send all comments to the IEPA Public Involvement Coordinator as listed at the end of this Notice by August 27, 1992. In response to public requests or at the discretion of IEPA or U.S. EPA, a public hearing can be held to clarify one or more issues concerning the draft permit decision. A request for a public hearing must be made in writing and must state the nature of the issue to be raised at the hearing. Written requests should be sent to the Public Involvement Coordinator listed below. Public notice will be issued 45 days before any hearing.

All comments submitted will become part of the Administrative Record and will be evaluated by IEPA and U.S. EPA in making the final permit decisions. The two agencies will respond to comments on the draft permit decision, and indicate whether additional documents have been included in the Administrative Record. Anyone who submits written comments will be notified of the final permit decision and the permit decision appeal process.

The IEPA Division of Land Pollution Control is authorized to administer the RCRA program and, as of April 30, 1990, specific 1984 HSWA provisions (amending RCRA) that address corrective actions, waste minimization, mixed wastes and other regulatory functions. Corrective Actions are

RI-27

responses required of facilities that have or have had releases of hazardous constituents. IEPA welcomes information from the public that describes any such releases. U.S.EPA is authorized to address newer provisions of HSWA such as land disposal restrictions and some TCLP modifications. For further clarification of program authority, refer to the March 1, 1990 Federal Register, Vol. 55, No. 41, pg 7320.

The permit application, draft permit decision, related information and all data submitted by the applicant, as part of the Administrative Record, are now available for public inspection Monday through Friday between 9:00 a.m. and 5:00 p.m. at the following location:

Illinois EPA
Government & Community Affairs
Attn: Mara McGinnis, Public Involvement Coordinator
2200 Churchill Road
P.O.Box 19276
Springfield, Illinois 62794-9276
217-524-3288

Please telephone ahead for an appointment to view the documents.

MM:SS:ks/056-2

B-122

OC NA IUSFPA

DEPARTMENT OF THE ARMY
ROCK ISLAND ARSENAL
ROCK ISLAND, ILLINOIS 61299-5000

May 26, 1992

REPLY TO
ATTENTION OF

SMCRI-SE

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control -- #24
Illinois Environmental Protection Agency
Post Office Box 19276
Springfield, Illinois 62794-9276

Dear Mr. Eastep:

The purpose of this letter is to provide the Agency with two pieces of correspondence that were generated as a result of the Rock Island Arsenal's Part B Permit Application (refer to: 1618130001 -- Rock Island County, Rock Island Arsenal, IL5210021833, RCRA Permit Log No. B-122).

In compliance with the RCRA Part B Permit Application guidance document, this office has provided several Federal offices with copies of the Part B application document and drawings. Enclosed with this letter are responses from:

a. U.S. Department of the Interior
   National Park Service
   (Wild and Scenic Rivers Act)

b. Rock Island Arsenal
   Directorate of Engineering and Housing
   ATTN: SMCRI-EHP
   (National Historic Preservation Act)

Additionally, this office was queried on 30 April 92 by the U.S. Fish and Wildlife Service as to the address of the IEPA, which we provided, so that they may provide their response directly to your office.

Should you need additional information regarding this subject, please contact Dr. David Foss at (309) 782-7926/7855 or write: Commander, Rock Island Arsenal, ATTN: SMCRI-SEM (Dr. David Foss), Rock Island, IL 61299-5000.

Sincerely,

Stephen R. A. Robinson
Acting Director, Science and
Engineering Directorate

RECEIVED
MAY 27 1992
IEPA-DLPC

Enclosures

RI-25

(402) 221-3485
FTS 864-3485

TERRY K. CEDERSTROM
ENVIRONMENTAL PROTECTION
SPECIALIST

U.S. DEPT. OF THE INTERIOR
NATIONAL PARK SERVICE
MIDWEST REGIONAL OFFICE

1709 JACKSON STREET
OMAHA, NE. 68102-2571

3/30/92 NO COMMENT
Terry K. Cederstrom

DEPARTMENT OF THE ARMY
ROCK ISLAND ARSENAL
ROCK ISLAND, ILLINOIS 61299-5000

REPLY TO ATTENTION OF

SMCRI-SE

March 25, 1992

Ms. Jill Medland
U.S. Department of Interior
Division of Planning and Environmental Quality
1709 Jackson Street
Omaha, Nebraska 68012-2571

Dear Sir or Madam:

The Rock Island Arsenal is applying to the Illinois Environmental Protection Agency for approval of a Resource Conservation and Recovery Act (RCRA) Part B Permit for a hazardous waste container storage unit. The storage unit will meet strict RCRA design requirements and will be used for short-term storage. The unit is remotely located from living quarters, administrative offices, manufacturing areas, and unimproved, natural areas on Rock Island Arsenal.

Your office is requested to review the enclosed copy of the Part B Permit Application and provide this office with your concurrence.

If you have any questions, please contact Dr. David Foss at (309) 782-7926, or (309) 782-7122 for fax messages.

Sincerely,

STEPHEN R. A. ROBINSON
Acting Director, Science and
Engineering Directorate

Enclosure

(402) 221-3485
FTS 864-3485

TERRY K. CEDERSTROM
ENVIRONMENTAL PROTECTION SPECIALIST

U.S. DEPT. OF THE INTERIOR
NATIONAL PARK SERVICE
MIDWEST REGIONAL OFFICE

1709 JACKSON STREET
OMAHA, NE. 68102-2571

3/30/92 NO COMMENT
Terry K. Cederstrom

SMCRI-EHP (420-74a)

06 APR 1992

MEMORANDUM FOR SMCRI-SEM (Dr. David Foss)

SUBJECT: Rock Island Arsenal's Resource Conservation and Recovery Act (RCRA), Part B Permit Application

1. Our review concurs that the enclosed RCRA Part B Permit Application is in compliance with the requirements of the Illinois Environmental Protection Agency. Our suggested hand written annotations are yellow tabbed for your convenience.

2. The point of contact for this action is Mr. Kermit Hanson, SMCRI-EHP, extension 22895.

Lanny R. Biehler

Encl

LANNY R. BIEHLER
Chief, Planning and
Inspection Division

Location of Bldg 249 on Map A?

IIB-2 Topographic Maps

IIB-2a General Map Requirements

Buildings 242 and 249 are located near the west end of the Rock Island Arsenal facility. The general location is shown on Map A, and it shows the surrounding roads and buildings near Buildings 242 and 249.

IIB-2a(1) Hazardous Waste Container Storage Unit Maps

This section presents the maps that are to be used to locate and identify the Hazardous Waste Container Storage Unit. These maps locate the proposed modification to the Hazardous Waste Container Storage Unit, Building 242, and proposed Flammable (Ignitable) Hazardous Waste Container Storage Unit, Building 249. The maps provide a 1000 foot radius circle around Buildings 242 and 249. The maps provided for the section are:

Map B: Storm Drainage.
This map provides information on the surface contours of the location of the proposed Buildings 242 and 249 in order to show water flow around the buildings.

Map C: Sanitary Sewerage.
This map provides information on the location of sanitary sewerage servicing Buildings 242 and 249.

Map D: Water Distribution System.
This map provides information on the location of water service to Buildings 242 and 249.

Map E: Surface Contours.
This map provides information on the location and identification of the 100 year flood plain area around Buildings 242 and 249.

Map F: Monitoring Wells.
This map provides information on the location and identification of the groundwater monitoring wells within the 1000 foot radius circle around Buildings 242 and 249.

Map H: Traffic Plan.
This map provides information as to the quantity of vehicular traffic, the evacuation routes, and the rally point in the location of Buildings 242 and 249.

Maps M: Building 242 As-Built Plans and Details
N: Building 242 Floor Plan Revisions
O: Building 242 Loading Dock Plans and Details

was

TABLE 6

SPILL CONTINGENCY SUMMARY
FOR STORAGE UNIT

The Spill Contingency Plan ~~has~~ was not ~~be~~ implemented as of 1 December, 1991. There has not been a spill, fire, explosion or release which has affected areas outside of the unit.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

APR 02 1992

REPLY TO THE ATTENTION OF:

HRP-8J

Lawrence Eastep, Manager
Permits Section
Division of Land Pollution Control
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, Illinois 62706

Re: Rock Island Arsenal
IL5 210 021 833

Dear Mr. Eastep:

Copies of the draft Federal Permit for Rock Island Arsenal; the Statement of Basis; and the Index to the Administrative Record for the draft Federal Permit are enclosed. All documents in the Administrative Record for the draft Federal Permit should also be included in the Administrative Record for the draft State Permit and available for the public to view at your Springfield office. If you need copies of any of the documents identified in the index, or have any other questions, please contact Gale Hruska, at (312) 886-0989, before the start of the comment period.

Sincerely,

GJH 3/27/92

George J. Hamper, Chief
Illinois Section
RCRA Permitting Branch

Enclosures

KSD 4/1/92

File Copy
RI-23

RCRA DRAFT PERMIT SIGN-OFF

BACKGROUND

FACILITY NAME (Owner/Operator) Department of the Army - Rock Island Arsenal
FACILITY LOCATION Rock Island, IL ID NUMBER IL5 210 021 833

TYPE OF PERMIT

X HSWA ___ Post-Closure ___ Class 3 Mod ___ Other _____

X STORAGE ___ TREATMENT ___ BIF ___ DISPOSAL
___ Subpart X

REVIEW PACKAGE CONTENT

X Draft Permit w/Attachments
___ Draft Public Notice*
X Fact Sheet/Statement of Basis
___ Facility Letter*
X Administrative Record Index
X Administrative Record
___ Other _____

APPLICABLE PERMIT CONDITIONS

X Land Disposal Restrictions
X Toxicity Characteristic
___ Waste Minimization
___ Corrective Action
X Air Emissions
___ Other _____

CONCURRENCES

		INITIALS	DATE
1.	PERMIT WRITER Name: Gale Hruska	GRH	3-27-92
2.	SECTION SECRETARY		
3.	SECTION CHIEF	GH	3/27/92
4.	TECHNICAL EXPERT (if applicable)	/	/
5.	RPB SECRETARY (logged only)	JmS	3/27/92

If U.S. EPA will be public noticing the draft permit, the package must go through PMB for sign-off. Please cross out if not applicable:

	~~RDS CHIEF~~	/	/
6.	~~ASST. REG. COUNSEL (ORC) Name:~~ _____	/	/
7.	~~PERMIT COORDINATOR (ORC)~~	/	/
8.	~~SWERB SECTION CHIEF (ORC)~~ Linda Olwes Proofed 3/30/92	/	/
9.	RPB SECRETARY	JmS	3/30/92
10.	RPB CHIEF	FEO	4/1/92
11.	OR SECRETARY	/	4/1/92
	ASSOCIATE DIV. DIRECTOR, OR	WEM	4/1/92

REVISED 3/92

* To be done by Illinois EPA

Administrative Record

~~FACILITY MANAGEMENT DOCUMENT LOG~~

Please Print

Facility DOA - Rock Island Arsenal

ID # IL5 210 021 833

Item #	Item Date	Description	Item Filed
RI-4	8-30-90	Letter: R. Bregard To L. Eastep re: Submission of Part B Application	Docket File Sec 2
5	8-30-90	a. Part B Application - Vol 1	Docket - Folder
		b. Part B Application - Vol 2	Docket Folder
7	12-12-90	Memo: G. Hrubka To Files Re: Permitting Issues	Sec 4 - Docket
8	1-10-91	Letter: G. Hamper to W. Shore Re: Request for Organic Air Emission Informa	Sec 2 - Docket
9	2-1-91	Letter: Achiel Dupont to G. Hamper Re: Response To Item 8 Letter	Sec 2 - Docket
10	3-18-91	Letter & Submission: A. Dupont to L. Eastep Re: Revisions to Part B	Docket Folder
14	12-12-89	Letter: L. Eastep to Commander RIA RE: NOTICE OF DEFICIENCY	Docket Folder
16	1-16-91	Letter: L. Eastep to Commander RIA RE: NOTICE OF DEFICIENCY	Docket Folder
17	10-2-91	Letter: L. Eastep to Commander RIA RE PART B Notice of Deficiency	Docket Folder
18	11-8-91	Letter: J. Hansen To L. Eastep RE: Response To NOD	Sec 2

STATEMENT OF BASIS FOR
THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (U.S. EPA)
DRAFT RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) PERMIT FOR
DEPARTMENT OF THE ARMY - ROCK ISLAND ARSENAL
ROCK ISLAND, ILLINOIS
IL5 210 021 833

RCRA PERMITS

In 1976, the Resource Conservation and Recovery Act (RCRA) amended the Solid Waste Disposal Act, 42 U.S.C. 6901 et seq., to require certain facilities engaged in treating, storing, or disposing of hazardous waste to have a permit for such activities. In 1984, the Solid Waste Disposal Act was again amended by the Hazardous and Solid Waste Amendments (HSWA). The 1984 legislation contains additional permitting requirements and also provides authority to the U.S. EPA to establish permit conditions for hazardous waste facilities beyond the scope of existing regulations, if necessary to protect human health and the environment.

On January 31, 1986, the State of Illinois received final authorization pursuant to Section 3006 of RCRA, 42 U.S.C. 6926, and 40 CFR part 271 to administer the pre-HSWA RCRA hazardous waste program. The State has subsequently been authorized to also administer individual provisions of HSWA. Because the State of Illinois has not yet received authorization to administer all of the HSWA requirements, additional permit conditions must be issued by the U.S. EPA to address the remaining HSWA requirements. These conditions are contained in the U.S. EPA issued permit, which together with the State of Illinois permit constitute the RCRA permit.

U.S. EPA PERMIT DECISION PROCEDURES

Section 7004(b) of RCRA, 42 U.S.C. 6974, and 40 CFR 124.10 and 124.11 require that the public be given a 45-day comment period for each draft permit issued under RCRA. The comment period begins on the date of publication of the public notice in a major local newspaper of general circulation. Any person interested in submitting comments on the draft permit must do so within this 45-day comment period.

As specified in 40 CFR 124.11 and 124.12, a public hearing will be held whenever a request for a public hearing is received during the 45-day public comment period. The request must be in writing and must state the nature of the issues proposed to be raised in the hearing. An announcement will be published in the legal notice section of a major or local newspaper, identifying the date, time and location of the hearing. Any person may submit oral or written statements and data concerning the draft permit at the hearing. The public comment period is extended to at least the close of the public hearing. All comments will be considered in making the final permit decision.

As specified in 40 CFR 124.15 and 124.17, after the close of the public comment period, the U.S. EPA will issue a final permit decision. Each person

who has submitted written comments, given oral testimony at the hearing, or requested notice of the final permit decision shall be notified of the U.S. EPA's decision. This notice will include references to procedures for appealing the decision, and will contain the U.S. EPA's response to all significant comments to the draft permit received from the public. The notice will also specify which provisions, if any, of the draft permit have been changed in the final permit and the reasons for the changes. Any new issues raised or submissions received during the public comment period will be entered into the administrative record.

Because the RCRA draft permit is being issued jointly by the State of Illinois and the U.S. EPA, and in order to consolidate the processing of information submitted by the public, all comments regarding the draft permit and requests for a public hearing should be submitted in writing to:

Illinois Environmental Protection Agency
Government and Community Affairs 5
Attn: RCRA Public Involvement Coordinator
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276

The U.S. EPA contact for this permit is Gale Hruska, who may be reached at (312) 886-0989.

FACILITY DESCRIPTION

The Rock Island Arsenal is a U.S. Army Armament, Munitions, and Chemical Command installation. The facility manufactures and assembles various armament related items, provides logistic and engineering support, and is the location for a number of Command administrative offices. The facility is located on an island in the Mississippi River. The only unit at the site requiring a RCRA permit is a storage building used to accumulate hazardous waste in containers for shipment off-site. No treatment or disposal of hazardous waste occurs at the facility.

BRIEF SUMMARY OF PERMIT CONDITIONS

This section provides a brief summary of the draft permit conditions. All citations in the Basis refer to the regulations codified in Title 40 of the Code of Federal Regulations (40 CFR).

Permit condition	Subject	Basis
I.A.	Effect of Permit	270.4 270.30(g)
I.B.	Permit Actions	270.30(f)
I.C.	Severability	124.16

I.D.1.	Duty to Comply	270.30(a)
I.D.2.	Duty to Reapply	270.30(b) 270.10(h)
I.D.3.	Permit Expiration	270.13 270.14 270.50 270.51
I.D.4.	Need to Halt or Reduce Activity Not a Defense	270.30(c)
I.D.5.	Duty to Mitigate	270.30(d)
I.D.6.	Proper Operation and Maintenance	270.30(e)
I.D.7.	Duty to Provide Information	270.30(h) 264.74
I.D.8.	Inspection and Entry	270.30(i)
I.D.9.	Monitoring and Recordkeeping	270.30(j) 270.31 264.73 264.74
I.D.10.	Reporting Planned Changes	270.30(l)(1)
I.D.11.	Anticipated Noncompliance	270.30(l)(2)
I.D.12.	Transfer of Permits	270.30(l)(3) 270.40(a) 264.12(c)
I.D.13.	Compliance Schedules	270.30(l)(5) 270.33
I.D.14.	Twenty-four Hour Reporting	270.30(l)(6) 270.33
I.D.15.	Other Noncompliance	270.30(l)(10)
I.D.16.	Other Information	270.30(l)(11)
I.D.17.	Submittal of Reports or Other Information	270.30(l)(7),(8),(9) 270.31
I.D.18.	Other Requirements	270.30
I.E.	Signatory Requirement	270.30(k)

I.F.	Confidential Information	270.12
I.G.	Documents to be Maintained at the Facility	264.13 264.73
II.A.	Land Disposal Requirements: General Conditions	268.1 268.3 268 Subparts B and C
II.B.	Testing and Related Requirements	268.7 268 Subparts C and D 264.13
II.C.	Storage Prohibitions	268 Subpart E 268.32 761.65(b)
III.A.	Toxicity Characteristic: Waste Characterization	261.24 261 Appendix II
IV.A.	Air Emission Standards: Process Vents	264 Subpart AA
IV.B.	Equipment Leaks	264 Subpart BB
IV.C.	Recordkeeping	264.1035 264.1036 264.1064 264.1065
IV.D.	Notification of Regulated Activity	270.30(l)(1)
IV.E.	Duty to Comply with Future Requirements	270.30(a)
V.	Schedule of Compliance	270.30(l)(5) 270.33

Section I. of the permit contains standard conditions which are part of every RCRA permit. These conditions address general requirements related to the implementation of the permit.

Section II. addresses the land disposal prohibitions for hazardous wastes mandated by HSWA. While the Permittee is not allowed to dispose of hazardous waste at the facility, it does send such waste off-site for treatment and disposal. The provisions in this section require the Permittee to comply with the applicable testing and storage requirements for these wastes.

Section III. requires the Permittee to determine whether or not any of the solid wastes which they manage exhibit the Toxicity Characteristic (TC)

identified in 40 CFR 261.4. (HSWA required the U.S. EPA to revise the original Extraction Procedure Toxicity Characteristic so as to identify additional hazardous waste characteristics.) These provisions require the Permittee to utilize the Toxicity Characteristic Leaching Procedure in lieu of the original Extraction Procedure when necessary to make a determination as to whether a solid waste exhibits the TC.

Section IV. requires the Permittee to comply with recent requirements regarding air emissions from certain process vents and from equipment leaks related to hazardous waste tank operations. The facility presently does not have any units to which these regulations apply. However, should the facility utilize such units in the future, they would have to comply with these HSWA required air emission regulations.

Section V. sets a compliance schedule for the facility to notify the U.S. EPA should it utilize any units subject to the air emission regulations identified in Section IV.

Part E : 2

Notice of Deficiency
Rock Island Arsenal
Part B Log No. B-122
LPC No. 16181300I
IL5210021833

RECEIVED
DEC 13 1991
IEPA-DLPC

Second Technical Review
October 2, 1991

The following deficiencies were found during a second technical review of the RCRA Part B permit application submitted for the above-referenced facility (All regulatory references are to 35.Ill. Adm. Code, Subtitle G; Waste Disposal):

A. Part A Application: 702.123, 702.126(a), and (d), 703.18)

Evaluate the wastes to be stored in Building 242 to determine if any exhibit the newly identified characteristic of toxicity, D018 through D043 identified to 35 Ill. Adm. Code 721.124. If any of the wastes possess a new characteristic not identified in the present Part A Application, Rock Island Arsenal (RIA) must modify the Part A Application and the Part B Application as appropriate.

RIA Response:

The waste streams to be stored in Building 242 and proposed Building 249 have been reevaluated to locate any waste streams exhibiting D018 through D043. The RCRA Part A , Section A, pages 3-9, has been revised to include those waste streams.

B. FACILITY DESCRIPTION

B-1 General Description: 703.183(a)

1. Provide a description and the quantity of each hazardous waste received during the previous calendar year at the storage unit.

2. RIA adequately described the generating process for the six waste streams which were specifically listed in the Agency's January 16, 1991 Notice of Deficiencies (NOD). However, RIA did not address all waste streams which may be stored in Bldg. 242 -- see Appendix A of RIA's March 15, 1991 Response to Deficiencies. Briefly describe the processes that generate each waste stream which may be stored in the hazardous waste container storage area, Building 242.

RIA Response:

1. Table 1, page 13, Hazardous Wastes Generated, has been developed in Section B-1 to provide the description and quantity of wastes during the previous calendar year.

2. Table 1, page 13, has a brief description of each waste stream generated at RIA.

B-2 Topographic Map: 703.183(s), 703.185(c), 703.185(d), 724.195, 724.197

B-2a General Map Requirements: 703.183(s)

The maps submitted to identify the location of the solid waste management units (SWMU) are not adequate, see the comments of items L-1 and L-1a for additional information.

RIA Response:

All maps have been revised and are located in Appendix H. Maps specific for the Rock Island Arsenal are discussed in Section IB-4, page 24, and maps specific to the Hazardous Waste Container Storage Unit are discussed in Section IIB-4, page 31.

B-4 Traffic Information: 703.183(j)

Provide an estimate of the number and type of vehicles traveling within 1,000 feet of Building 242 each day.

RIA Response:

The estimate of the number and type of vehicles traveling within 1,000 feet of the Hazardous Waste Container Storage Unit is located on Map H and is discussed in Section IIB-4, page 31.

B-5 Operating Record: 724.173

1. Summary reports and details of all incidents that require implementing the contingency plan, as specified in Section 724.150(j), must be included in the record. Describe how this will be done.

2. The total quantity of each hazardous waste stream present in Building 242 should be updated when waste is added to the unit or at a minimum at the end of the day when waste has been added to the unit. The total amount of each waste stream in storage must be available at all times.

3. The results of waste analysis are given in Appendix A of the information submitted March 15, 1990. These results are not an adequate waste analysis as required by Item C-1 below, however, they are adequate for the operating record information set up.

4. All hazardous waste stored within the storage area must be shipped off-site as a hazardous waste under a manifest in accordance with 35 Ill. Adm. Code Parts 722 and 809. The only exception to this requirement would be if RIA can demonstrate, to the Agency's satisfaction, that a given waste does not meet the definition of a solid waste as defined in 35 Ill. Adm. Code Section 721. Such a demonstration must be developed and submitted to the Agency for review and approval as described in the Agency's "Procedures to be Utilized in Developing Solid Waste Determination Request" (Attachment 1).

5. Figure 2-21 is not an inspection log, but rather it is a copy of the operating log. See also Sections F-2a through F-2a(2) of the application and Items F-2a and F-2a(1) below.

6. Item D-1a(2) below relates to the repackaging of the off-specification waste in original containers. Describe how such efforts will be documented in the operating record.

RIA Response:

Section B-5, page 33, Operating Record, has been revised to include the following discussion:

1. Inclusion of incidents that require implementation of the contingency plan.

2. A summary storage record has been developed that will indicate when waste was added.

3. No comment.

4. Only hazardous waste is to be stored in the storage unit. Only hazardous waste is to be shipped off-site as a hazardous waste under a manifest.

5. All figures and tables have been renumbered and repositioned in the text of the revised Part B, refer to the Table of Contents for page numbers.

6. Only properly labeled and sealed drums will be accepted in the storage unit; no repackaging is to be performed in the storage unit. Off-spec materials are to be packaged by the generator in 20, 55, or 85 gallon overpack drums prior to delivery at the storage unit. No modification of the operating log, page 35, is required.

C. WASTE CHARACTERISTICS

C-1 Chemical and Physical Analyses: 703.183(b), 724.113(a)

For each hazardous waste to be stored at the facility, describe the waste, the hazard characteristics, the basis for hazard designation, and provide a laboratory report detailing the chemical and physical analyses of representative samples. At a minimum, these analyses must contain all the information which must be known to treat, store or dispose of the hazardous wastes properly in accordance with 35 IAC Subtitle G. This information must be provided for the waste streams identified in the application and any waste streams identified in carrying out the evaluation required by Item A above.

Provide a copy of the laboratory waste analyses report, on laboratory letterhead and signed by a responsible party of the lab, that details the chemical and physical properties of representative samples of each waste stream. As a minimum, the waste must be analyzed for all of its possible hazardous constituents and the parameters set forth in the Agency's instructions (for) Special Waste Stream Application revised May 1, 1991 (see Attachment 2). Appendix A of the March 1991 submission does not meet the above requirements. The only exception to the need for laboratory

waste analysis reports is for off-specification material that has not been used in any process. Copies of either MSDSs or other published information for each off-spec material to be stored in the unit may be provided in lieu of the laboratory reports.

RIA Response:

All waste streams have been identified and tabulated in Table 1, page 13. Each waste stream has chemical analysis or TCLP analytical form from contractor lab accompanying the waste stream - see Appendix A.

The waste stream analysis is to be done annually, or on as-needed basis.

C-2 Waste Analysis Plan: 703.183(c), 724.113(b) and (c)

C-2a Parameters and Rationale: 724.113(b)(1)

1. List parameters chosen for analysis and explain the rationale for their selection. At a minimum each waste must be analyzed for all its possible hazardous constituents and the parameters set forth in the Agency's special waste stream application instructions (see item C-1 above).

2. Table 3-2, page C-15 of the application does not list all of the analytical parameters for each waste. For example, Item 2 only lists TCLP for 3 metals and does not include other parameters. In addition, item 12 has no parameters listed, and Item 25 lists EP toxicity as a parameter. This table must be revised to include all appropriate parameters as indicated in Item C-1 above.

RIA Response:

1. All of the parameters requiring analysis are identified and listed in Table 10, page 60, Parameters and Test Methods for Wastes Stored in Buildings 242 and 249, in Section C-2a.

2. ibid

C-2b Test Methods: 724.113(b)(2)

Additional test methods must be identified to reflect changes required by Item C-1 and C-2a above.

RIA Response:

All testing methodology and references are located in Table 10, page 60, Parameters and Test Methods for Wastes Stored in Buildings 242 and 249, Section C-2a.

C-2c Sampling Methods: 724.113(b)(3), 40 CFR 261 - Appendix I

List the sampling methods used to obtain a representative sample of each waste to be analyzed and document that the chosen method is appropriate

for the type and nature of the waste. Pages three-1 to three-5 of SW-846, Volume IA, 3rd Edition (referenced on page 19 of RIA's March 15, 1991 response) refer to the analysis of metal constituents and would therefore not be appropriate for all of the analytical parameters which must be run (such as volatile organic compounds).

RIA Response:

All sampling methods used to obtain a representative sample of each waste to be analyzed are shown in Table 11, page 62, Sampling Methods for Waste Streams, Section C-2c.

C-2d Frequency of Analyses: 724.113(b)(4)

Listed waste must also be tested annually or when there is a change in the generating process. Listed waste must be analyzed for all hazardous constituents which may be present in the waste including the characteristics of hazardous waste as set forth in 35 Ill. Adm. Code 721. For example, F003 paint waste may also be hazardous due to metals and other TCLP parameters.

RIA Response:

All waste streams, which includes the listed waste streams, are to be tested annually, or when there is a change in the generating process, or when required by the transporter, the disposal site, or by the Agency.

C-2f Additional Requirements for Ignitable, Reactive or Incompatible Wastes: 724.113(b)(6), 724.117

Each waste must, at a minimum, be classified for compatibility pursuant to (1) 40 CFR 264 Appendix V, (2) pages B9A-9F of USEPA OSWER Document #9938.4 and (3) the procedures set forth in "A Method for Determining the Compatibility of Hazardous Wastes" (EPA 600/12-80-076, April, 1980). The classification of each waste stream must be identified in the application. Depending upon the results of this classification effort, the container storage area may have to be modified to ensure incompatible wastes are properly segregated.

RIA Response:

All waste streams are classified for compatibility as regards the waste stream's hazard characterization; refer to Table 7, page 50, and Table 8, page 55, Hazardous Waste Generated on RIA, Associated Hazards, and Basis for Hazard Designation for Building 242; and Hazardous Waste Generated on RIA, Associated Hazards, and Basis for Hazard Designation for Building 249, respectively.

C-2g Waste Analysis Requirements for Land Disposal Ban

35 Ill. Adm. Code 728.104 applies to waste being treated in surface impoundments and would not apply to RIA. RIA must comply with the requirement for generators, i.e. 35 Ill. Adm. Code 728.107(a).

RIA Response:

Section C-2g, pages 65 and 66, has been revised, and the certification statements have been corrected.

C-3 Quality Assurance: 702.145

RIA need not identify specific laboratories or submit their quality assurance plans as long as the permit application specifies that any outside laboratory used to analyze waste will follow the quality assurance requirements set forth in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Third Edition (SW-846).

RIA Response:

Section C-3, page 66, has been revised so that quality assurance requirements, as set forth in Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, 3rd Ed. (SW-846), have been included in the contracts with outside laboratories performing waste analysis for RIA.

D. PROCESS INFORMATION

D-1 Containers

D-1a Containers with Free Liquids

D-1a(1) Description of Containers: 724.271, 724.272

For each type of container which will or may be placed in the storage area, provide the following information: (1) approximate number of each type of container, (2) construction materials, (3) dimensions and usable volumes, (d) DOT specifications or other manufacturer specifications, (5) liner specifications (if applicable), (6) container condition (new, used, reconditioned), (7) markings and labels, and (8) actual hazardous waste, streams to be placed in the container. Identify the name of the waste stream, its EPA identification number, hazard classification and physical state when identifying the actual hazardous waste streams to be placed in each type of container.

The above information will not be required for the original containers holding off-specification material that has never been used, if the off-spec material in the original containers is only accumulated in the storage area until sufficient quantities are available to fill an overpack container. In this case, the above information must be provided for the overpack containers that will be used for off-spec material. Different off-spec waste streams cannot be placed into the same overpack container unless it can be demonstrated in the application that the off-spec materials are compatible with (1) each other, (2) the overpack containers and (3) all of the other off-spec material containers to be placed in the overpack.

RIA Response:

Section D-1a(1), has been revised so as to describe container description, D-1a(1)(a); number of containers, D-1a(1)(b); types of containers, D-1a(1)(c), page 68; container condition, D-1a(1)(d); container markings and labels, D-1a(1)(e), page 69; and materials for assuring compatibility of waste with container, D-1a(1)(f), page 71.

D-1a(2) Container Management Practices: 724.273

1. Describe the container management practices for handling off-spec material in original containers.

2. Provide a detailed description of how the off-spec material and leaking containers will be overpacked, including a description of where the material will be overpacked, any special safety equipment that may be needed, modification of the operating log, etc.

3. If the off-spec material will first be accumulated in Building 242 prior to consolidation (see comment on Section D-1a(1) above), identify how the newly overpacked material will be identified in the operating record, e.g. initially there may have been 10 containers of material X and after overpacking there may only be one container of material X. This must also be addressed in Section B-5 of the application.

4. Identify the maximum stacking height of off-spec material that may be placed on pallets for storage.

RIA Response:

Section D-1a(2)(a), Safe Storage and Closure of Containers, page 71, discusses handling practices for off-spec materials in original containers. Section D-1a(2)(b), Maximum Number of Containers and Stacking Heights, page 71, discusses stacking heights and maximum storage. Section D-1a(2)(c), Location of Ignitable, Reactive or Incompatible Wastes, page 72, discusses the determination and location of incompatible wastes.

D-1a(3) Secondary Containment System Design and Operation: 703.201(a)(1), 724.275(a) and (d)

Provide design and profile drawings of the container storage area(s) which have been redesigned to reflect the deficiencies noted in Item F-5b below. These drawings must show the secondary containment system and the arrangement of containers. Indicate on the drawings the areas in which incompatible wastes will be stored. Wastes which are incompatible may not be stored within the same secondary containment system. Waste must also be prevented from falling and/or spilling into adjacent containment systems where incompatible materials are stored through the use of barriers or other equivalent means.

RIA Response:

Section D-1a(3), page 74, has been revised to include the proposed Building 249. The proposed Building 249 is to be used to store flammable (ignitable) wastes only.

Map S, Proposed Building 242 Plan and Sections, and Map T, Proposed Flammable Storage Area, have been prepared to describe the incompatible materials storage layout.

D-1a(3)(a) Requirement for the Base or Liner to Contain Liquids: 724.275(b)(1)

A demonstration must be provided regarding the capability of the base of Building 242 to contain liquids. This demonstration must include:

- A statement that the base is free of cracks or gaps;
- A demonstration that the base is impervious to wastes and precipitation;
- A description of the base design and construction, including the materials from which it was constructed;
- An engineering evaluation of the base's structural integrity.
- A discussion of the compatibility of the base with wastes to be stored in the area; and
- A demonstration that the epoxy coatings and joint sealing materials are compatible with the waste to be stored in the storage areas.

RIA Response:

Section D-1a(3)(a), page 75, has been revised to include a letter, with documentation, which provides RIA Engineering and Housing Directorate demonstration of the capability of the base of the storage unit to contain liquid.

D-1a(3)(b) Containment System Drainage: 703.201(a)(2), 724.275(b)(2)

1. If containers are to be stored on the base of the containment system, the base must be sloped or must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation. The design and/or operation of Building 242 must be modified to meet this requirement.

2. If containers are to be placed in cabinets, adequate storage (specifically enough to store all the material in the cabinet) must be available to temporarily store any waste which must be removed from the cabinet to cleanup any observed releases.

RIA Response:

Section D-1a(3)(b), page 75, discusses the description of the containment system in the proposed storage unit. Also discussed is the use of steel storage cabinets for emergency storage of hazardous waste.

D-1a(3)(c) Containment System Capacity: 703.201(a)(3), 724.275(b)(3)

1. Although the containment calculation for the storage area floor is adequate, the secondary containment system itself is not adequate because as currently designed wastes may be stored within the same secondary containment system (see Item C-2f, D-1a(3) and F-5d). Calculations must be provided demonstrating that the containment capacity of the revised secondary containment system meets the requirements of 35 Ill. Adm. Code 724.725(b)(3).

2. Give the dimensions of the secondary containment system of the steel containment cabinets and demonstrate that the system is adequate.

RIA Response:

Section D-1a(3)(c), page 75, discusses the capacity of the containment system proposed for the storage unit. Additionally, the dimensions and capacity of the steel storage cabinet is discussed.

D-1a(3)(e) Removal of Liquids from Containment System: 703.201(a)(5), 724.275(b)(5)

1. Specifically reference the section of the contingency plan which addresses the cleanup of spills and indicate these procedures will be followed when responding to a spill or completely describe the procedures to be followed in removing liquids from the containment system.

2. The response to the previously noted deficiency indicates that Appendix I through M have been added to describe the response procedures for oil, acid, caustic, flammable, combustible liquids and pesticide spills. The following is a list of the titles of Appendices I through M.

   Appendix I -- "Updated Office Symbols being Used at the Rock Island Arsenal"

   Appendix J -- "Rock Island Arsenal Hazardous Waste Minimization Plan"

   Appendix K -- "Rock Island Arsenal Waste Analysis Plan"

   Appendix L -- "Solid Waste Management Unit Reports"

   Appendix M -- "Hazardous Waste Disposal Information"

   The information in these appendices does not appear to describe how liquids will be removed from the containment system.

RIA Response:

1. Section D-1a(3)(e), page 77, discusses the removal of spills from the proposed containment system and the steel storage cabinets.

2. The references to Appendix I-M are to be found in the Appendices of the RIA Contingency Plan. They are now incorporated into Section G.

F. PROCEDURES TO PREVENT HAZARDS

F-1 Security: 703.183(d), 724.114

F-1a(1) 24-Hour Surveillance System: 703.183(d), 724.114(b)(1)

This section is not technically adequate. However, this section is not applicable since the requirements of Sections F-1a(2)(a) and (b) are met.

RIA Response:

Section F-1a(1), page 84, describes the surveillance existing for the storage unit.

F-1a(2) Barrier and Means to Control Entry: 724.114(b)

F-1a(2)(a) Barrier: 724.114(b)(2)(A)

The storage building itself is an adequate barrier. Continuous 24-hour monitoring of the area will not be required, provided the doors of the building are locked at all times unless waste is being placed into or taken from the building.

RIA Response:

Section F-1a(2)(a), page 84, discusses the need for a barrier for the storage unit.

F-1a(2)(b) Means to Control Entry: 724.114(b)(2)(B)

See comment in Item F-1a(2)(a). The locked doors of the storage building are an adequate means to control entry into the storage area.

RIA Response: No comment.

F-2 Inspection Schedule: 703.183(e), 724.115

F-2a General Inspection Requirements: 703.183(e), 724.115(a) and (b), 724.133

1. Specify where the inspection schedule and inspection log sheet will be kept. The March 15, 1991 response to deficiencies indicates that they will be kept at the facility. Does "facility" refer to Bldg. 242? The Agency defines facility as the entire RIA and Bldg. 242 as the hazardous waste storage unit.

2. The operating log, including the inspection log sheets, should not be kept within the storage area itself. These records should be kept in a location that is accessible in the event of an emergency such as a fire in the storage unit. Since the unit is to be inspected every time it is opened, a convenient location for the log may be the same building where the key to the storage unit is located.

RIA Response:

Section F-2a, page 85, discusses the inspection schedule and the location of the inspection log sheet, which is kept at the Building Manager's office, for the unit.

F-2a(1) Types of Problems: 724.115(b)(3)

Table 3-7 should be revised to include inspection of expiration dates of the disposable respirators and cartridges. Fire extinguishers, SCBAs, emergency clothing, eye wash, and safety shower must be inspected for their performance in addition to quantity. The inspection of this equipment for performance must demonstrate that the equipment is usable. Performance inspection of this equipment may not have to be done on a weekly basis.

RIA Response:

Section F-2a(1), page 86, has been revised to include Table 12, page 87, the General Inspection, and Table 13, page 88, the Specific Process Inspection Schedule. These Tables include inspection of expiration dates.

F-3b Aisle Space Requirement: 724.135

1. The aisle spacing is adequate, however, the secondary containment system is not (see Item D-1a). Therefore, a demonstration must be provided that the aisle space provided in the re-designed system is adequate.

2. Identify the aisle spacing that will be maintained inside the steel containment cabinets. Demonstrate that this spacing meets the requirements of 35 Ill. Adm. Code 724.135.

RIA Response:

Section F-3b, page 91, discusses the aisle space requirement for the containment system proposed for Buildings 242 and 249, refer to Maps S and T respectively. The aisle space for the steel storage cabinets is also addressed.

F-4 Preventive Procedures, Structures and Equipment: 703.183(h)

F-4a Unloading Operations: 703.183(h)(1)

Describe the procedures used when transferring off-spec materials in their original containers to the storage area. See also the comments in Item D-1a(2).

RIA Response:

Section F-4a, page 92, describes the procedures to be used when transferring off-spec materials in original containers.

F-4d Equipment and Power Failure: 703.183(h)(4)

In the event of a power outage that affects the telephones, what emergency communication equipment would be available?

RIA Response:

Section F-4d, page 93, describes the equipment to be provided to the Building Manager in the event of equipment and power failure.

F-4e Personal Protective Equipment: 703.183(n)(5)

Appendix A of the March 15, 1991 response identifies the personnel protective equipment (PPE) to be used for each waste stream through the use of identification numbers. Identify what PPE is associated with each identification number. Demonstrate that the PPE chosen is adequate.

RIA Response:

Section F-4e, page 93, discussed the personal protective equipment (PPE) to be used for each waste stream. This is done through the development of Table 7, page 50, and Table 8, page 55, Hazardous Waste and Associated Waste Characteristics, etc., Section C-1; and Table 9, page 56, PPE Required for Routine Handling of Hazardous Waste, Section C-1.

F-5 Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes

F-5a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste: 703.183(i), 724.117(a), 724.13)

Describe the heating system in Building 242. If the building uses gas heaters, identify what precautions are taken to assure that any flames or heat generated from the system will not cause a fire or reaction in the storage unit.

RIA Response:

Section F-5a, page 96, describes the precautions to prevent ignition or reaction of ignitable wastes. This section proposed the development of a separate building, Building 249, as a flammable waste storage building, as seen in Map T. Building 249 will not contain a source for open flames.

F-5c Management of Ignitable or Reactive Waste in Containers: 703.201(c), 724.276

Halogenated solvents must be stored separately from ignitable waste, unless RIA can demonstrate in the application that a fire involving the halogenated solvents, e.g. F001 and F002 waste, will not affect areas outside of the facility.

RIA Response:

Section F-5c, page 97, indicates halogenated solvents are to be stored separated from ignitable waste.

F-5d Management of Incompatible Wastes in Containers: 703.201(d), 724.277

1. If a storage container holds a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, document that the wastes are separated from the other material or protected from them by means of a dike, berm, wall or other device. See Item C-2f above for compatibility classifications. Thus, the container storage area, including its secondary containment system and any associated appurtenances, must be redesigned, as necessary, to ensure incompatible wastes are properly segregated (see also Item D-1a(3) above).

2. If two or more waste streams may be stored within the same secondary containment area (SCA), demonstrate that all waste which may be stored within a given SCA are compatible with each other. Identify which waste streams may be stored together within a SCA. Include the waste stream names, their EPA identification numbers, hazard classification and their compatibility classifications (identified in accordance with the documents specified in Section C-2f of this Notice of Deficiencies).

RIA Response:

Section F-5d, page 97, describes the management of incompatible wastes. Building 242 is shown on Map S, and the design of the containment area for the incompatible wastes is given.

G. CONTINGENCY PLAN: 703.183(g), 724.137, 724.150 through 724.156, 724.152(b)

General Comments:

1. The requirements for the contingency plan have been updated since the last review. Therefore, deficiencies that were not previously noted may be identified.

2. The contingency plan must be prepared as a stand alone document (i.e. the plan must contain all necessary information independent of the

rest of the Part B application) as copies of the contingency plan, i.e. Section G, must be sent to all locations emergency response teams that may be called upon to provide emergency services.

RIA Response:

Section G, pages 100-150, is prepared as a stand-alone document. Section G is the Spill Contingency Plan for the Hazardous Waste Container Storage Unit (Buildings 242 and 249).

G-1 General Information

1. A copy of the site plan (Map A) must be included in the contingency plan. The location of Building 242 within the facility must be identified.

2. The following information must be incorporated into this section of the application:

   a. A list of all hazardous wastes to be managed at the facility (generic name), including the EPA hazardous waste number.

   b. A scaled drawing showing the location of all hazardous waste management units at the facility and all other areas where hazardous waste is handled at the facility (such as loading/unloading areas, etc.). This scaled drawing must also identify the entrances to the facility, roads within the facility and possible evacuation routes;

   c. A description of the types of waste managed at each hazardous waste management unit at the facility.

   d. A description of the procedures used to handle hazardous waste at the facility;

   e. An estimate of the quantity of the various types of hazardous waste which may be present at the facility. An estimate of the typical inventory of hazardous wastes at the facility must also be included.

RIA Response:

Section G-1, page 102, contains maps of the site plan, lists of the hazardous wastes stored, description of the wastes, description of the handling practices, and an estimate of the quantity of wastes.

G-2 Emergency Coordinators: 724.152(d), 724.155

Demonstrate that at least one Emergency Coordinator (EC) will always be present at the facility or on call, i.e. able to reach the facility in a short period of time. Define the length of time that it will take for the EC to reach the facility. The length of time that the EC will have to respond to an emergency will depend on how quickly

he/she must implement the plan in order to minimize adverse effects on human health and the environment. This may require that an EC be present on-site at all times, i.e. immediately available. This will depend in part on your responses to items G-4C and G-6.

A statement authorizing the coordinator to commit all necessary resources to the plan must be provided. The EC must be authorized to immediately, without approval from other persons, commit necessary resources from both on and off site to implement the contingency plan. This authorization statement must be signed by persons meeting the signatory requirements set forth in 35 Ill. Adm. Code 702.126.

Section G-2.3, page G-3, indicates that manpower will be supplied by the generator's organization. The personnel must be trained as required by 29 CFR 1910 OSHA's Hazardous Waste Operations and Emergency Response Standards.

RIA Response:

Section G-2, page 112, provides a demonstration that an Emergency Coordinator will be available at all times, that the Coordinator has been authorized (letter) to commit necessary resources, and the training requirements.

G-3 Implementation: 724.151(b), 724.152(a), 724.156(d)

The contingency plan must be implemented for a spill, fire, explosion or release of any size unless it can be demonstrated in the application that a specific release will not effect areas outside of the unit. If this demonstration is made, a description of the criteria that the EC will use to decide if the contingency plan will be implemented must be provided.

RIA Response:

Section G-3, page 117, describes the criteria for the implementation of the contingency plan.

G-4 Emergency Response Procedures: 724.156

Development of an adequate contingency plan requires that an evaluation be conducted of the facility's hazardous waste management activities, including potential emergency situations (release, fire or explosion) and the consequences of these emergency situations. As a minimum, the information which must be evaluated in developing the contingency plan includes:

1. The type, amount and variety of waste managed in each hazardous management unit (HWMU) at the facility.

2. The location of the waste within each HWMU and within the facility overall;

3. Waste handling practices;

4. Possible hazards which may result from a release, fire or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). This requires an estimation of the types and quantities of gases that can be generated. The evaluation of these hazards may require the use of commercially available models to simulate what may happen in the event of an emergency;

5. The effects of weather conditions in the event of a release, fire or explosion;

6. The extent of the area (on-site and off-site) impacted by a release, fire or explosion. This may require use of commercially available models;

7. The information required by the emergency coordinator (EC) to determine if a release, fire or explosion could threaten human health or the environment outside the facility.

   a. The information and criteria to be used by the EC in making this determination must be provided in the plan. Simply stating that the EC will make a determination at the time of the emergency is not adequate.

   b. The time required to make such a determination should be compared with the time it takes for the emergency to have an off-site impact. This will give some indication of the "reaction time" available in the event of an emergency.

8. The information required by the EC to determine if evacuation of local areas is advisable.

   a. The information and criteria to be used by the EC in making this determination must be provided in the plan. Simply stating that the EC will make a determination at the time of the emergency is not adequate.

   b. The time required to make such a determination should be compared with the time it takes for the emergency to have an off-site impact. This will give some indication of the "reaction time" available in the event of an emergency.

9. The person the EC should notify if evacuation of the local area is determined to be advisable.

10. The capabilities of the on-site emergency response system, the capabilities of the off-site emergency response entities (training, equipment, availability, etc.), and the agreements/arrangements made with state and local emergency response entities.

A report should be provided as an appendix to the application demonstrating that this information was evaluated and utilized in developing the contingency plan.

RIA Response:

Section G-4, page 117, describes the emergency response procedures for the evaluation of the contingency plan for the Hazardous Waste Container Storage Unit. RIA will determine if government computer modeling systems are available to evaluate the unit.

G-4a Notification: 724.156(a)

Describe the methodology for immediate notification of the necessary state or local agencies. Page 49, Section G-4, of RIA's March 15, 1991 response indicates that "The EC shall immediately notify either the government official designated as the on-scene coordinator for that geographical area, ... or the Nation Response Center . . ." This notification procedure must be moved into Section G-4a. Specify who the EC will notify. If the EC will notify the on-scene coordinator, identify the person and the appropriate phone number(s).

The EC must also notify:

- The IEPA Emergency Response Unit
- The Illinois Emergency Services and Disaster Agency
- All local police and fire departments, hospitals, and emergency response teams identified in Section G-6.

RIA Response:

Section G-4a, page 122, describes the methodology for the immediate notification of necessary state and local agencies. Those agencies are listed.

G-4b Identification of Hazardous Materials: 724.156(b)

Describe procedures to identify the character, exact source, amount and area l extent of any released material involved in the emergency. When making this evaluation the EC should also consider information provided by persons discovering the fire, spill, explosion or release.

RIA Response:

Section G-4b, page 123, describes the methods used to identify and quantify spills.

G-4c Assessment: 724.156(c) and (d)

To properly respond to an emergency, the EC must identify the character, source and amount of waste involved in the emergency. Concurrently, the EC must also assess the possible hazards to human health or the environment resulting from the emergency. This assessment must consider (1) direct and indirect health and/or environmental effects of the emergency and (2) the extent of the area which will be impacted by the emergency. The area of impact of a release is of great importance because it will normally be used to determine the size of the size of the area which must be evacuated.

Due to the fact that there will be limited time to properly assess hazards during an emergency, the contingency plan must describe in detail the information and criteria the EC will use in assessing (1) effects on human health and the environment and (2) the area which may be impacted by the emergency. Specifically, the contingency plan must describe the hazards associated with releases and fires involving the various hazardous wastes managed at the facility and the area impacts of such emergencies. The information which must be incorporated into the contingency plan includes:

a. The information listed below pertaining to the various chemical and physical properties of each hazardous waste managed in the unit. If the waste is a mixture of materials for which the mixture's properties listed below have not been identified, provide the information listed for as many of the individual components of the mixture as possible along with its percentage.

   Compound Name
   USEPA Hazardous Waste No.
   IDLH
   TLVs, (TLV-TWA, TLV-STEL, TLV-C)
   Vapor Pressure @ 68 degree F and 100 degree F
   Upper and Lower Explosion Limits
   Boiling Point
   Specific Gravity
   NFPA Designation (flammable or combustible)
   Material Safety Data Sheets
   Other Appropriate Characteristics (such as reactive class,etc.)
   USDOT Classification

b. An identification of the products of incomplete combustion associated with (1) flammable or combustible hazardous wastes managed at the facility and (2) wastes managed at the facility which are hazardous due to the characteristics of ignitability (D001) or reactability (D003).

c. An evaluation of the hazards associated with a release or possible fire involving the various hazardous wastes which may be managed at the facility.

d. An evaluation of the area which may potentially be impacted during a release or possible fire involving the various hazardous wastes managed at the facility.

This evaluation must identify the on-site area which must be evacuated in the event of a spill, fire, release, etc. Demonstrate that the area to be evacuated is adequate to protect human health.

RIA Response:

Section G-4c, page 123, describes the information regarding assessment of emergencies.

G-4d Control Procedures: 724.152(a)

1. The area to be evacuated must be modified if the results of the evaluation required above in Item G-4c indicate that it differs from the 300 feet specified in this section.

2. Demonstrate that the type of respiratory protection and protective garments to be used in the cleanup or spills is adequate for all types of waste stored in the unit. If the protective equipment is not compatible with all of the waste streams, describe how the correct equipment is chosen during an emergency.

RIA Response:

Section G-4d, page 125, describes control procedures for emergencies.

G-4e Prevention of Recurrence or Spread of Fires, Explosions, or Releases: 724.156(e)

Following the occurrence of a fire, explosion, or release, RIA should evaluate the cause(s) of the problem and modify the operating procedures, design of the unit, etc. in order to prevent recurrence of the problem, if possible.

RIA Response:

Section G-4e, page 129, describes the process to evaluate modification of the storage unit to correct an occurrence of an emergency.

G-4i Container Spills and Leakage: 724.152m 724.271

Specify procedures to be used when responding to container spills or leakage, including procedures and timing for expeditious removal of spilled waste and repair or replacement of the container(s). See item G-4d above.

RIA Response:

Section G-4i, page 129, describes procedures to be used when responding to container spills and removal of pick-up.

G-6 Coordination Agreement Requirements: 724.137, 724.152(c), 724.153(b)

The response to many emergencies which only have on-site impacts and to all emergencies which have off-site impacts require the involvement of the local fire and policy departments, as well as other local emergency response entities (local Emergency Services and Disaster Agency coordinator, local hospital, etc.). Appropriate response to such emergencies requires close coordination and cooperation with these entities. Such a relationship can only be established through prior planning and developing and updating agreements between these entities and the facility. According to 35 Ill. Adm. Code 724.152(c), the contingency plan must describe the arrangements agreed to by the facility and local police departments, fire departments, hospitals, contractors and state/local emergency response teams to coordinate services needed during an emergency at the facility. Pursuant to 35 Ill. Adm. Code 724.137, the facility must attempt to:

a. Make arrangements to familiarize police, fire departments and emergency response teams with the layout of the facility, properties of hazardous wastes handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility and possible evacuation routes;

b. Establish agreements designating primary emergency authority to a specific police and a specific fire department, where more than one police and fire department might respond to an emergency. Agreements should also be made with the other surrounding police and fire departments to provide support to the primary emergency authorities.

c. Establish agreements with state emergency response team, emergency response contractors and equipment suppliers;

d. Make arrangements to familiarize local hospitals with the properties of the hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions or releases at the facility.

The facility should also attempt to develop emergency plans and coordination agreements with the state and local emergency entities identified above. The detail of the arrangements and agreements made with the local and state emergency entities will be dependent upon the types of wastes handled at the facility and the potential need for the services of the various entities. In addition, the facility must also conduct annual meetings with the entities identified above to review the agreements and the facility's operations and to discuss any change in the facility or its contingency plan.

Given the above requirements and recommendations, the RCRA Part B permit application must either (1) describe in detail the arrangements and

agreements made with each of the local and state emergency entities identified above (required by 35 Ill. Adm. Code 724.137) or (2) contain written documentation that the entity refused to enter into such arrangements/agreements.

To properly familiarize the emergency response entities identified above with this facility, the information which follows must be provided to the local fire department, the local police department and all other agencies identified in 35 Ill. Adm. Code 724.153(b) (note that this information must be provided to these entities to ensure the requirements of 35 Ill. Adm. Code 724.137 are met):

a. A list of all hazardous wastes to be managed at the facility (generic name), including the EPA hazardous waste number;

b. A scaled drawing showing the location of all hazardous waste management units at the facility and all other areas where hazardous waste is handled at the facility (such as loading/unloading areas, etc.). This scaled drawing must also identify the entrances to the facility, roads within the facility and possible evacuation routes;

c. A description of the types of hazardous waste managed at each hazardous waste management unit at the facility.

d. A description of the procedures used to handle hazardous waste at the facility.

e. An estimate of the quantity of the various types or hazardous wastes which may be present at the facility. An estimate of the typical inventory of hazardous wastes at the facility must also be included;

f. The following information regarding the properties of the hazardous wastes managed at the facility:

Name
USEPA Hazardous Waste No.
IDLH
TLVS (TLV-TWA, TLV-STEL, TLV-C)
Vapor Pressure at 68 F (20 C)
NFPA Designation (flammable or combustible)
Material Safety Data Sheets
Other appropriate characteristics (such as reactive class, etc.)
USDOT classification

g. An identification of the products of incomplete combustion associated with (1) flammable or combustible hazardous wastes managed at the facility and (2) wastes managed at the facility which are hazardous due to the characteristic of ignitability (D001) or reactivity (D003).

The application must contain the information identified above and must also contain documentation that this information has been provided to the appropriate entities. In addition, documentation must also be provided that the local emergency response entities identified above have been that the local emergency response entities identified above have been provided with the most recent copy of the facility's contingency plan.

RIA Response:

Section G-6, page 134, describes the coordination agreements existing for the RIA, the letters used to request services from hospitals, and the means to familiarize emergency responders to RIA requirements.

G-7 Evacuation Plan: 724.152(f)

Map L was located, however, in the March 15, 1991 response Map L is the Flood Insurance Rate Map. The identification of one of these maps should be changed so the application will not have two different maps with the same identification. Please note that the drawing depicting the evacuation plan must be included in the contingency plan.

Page 56 of the March 15, 1991 response indicates that an area of at least 300 feet around Building 242 will be evacuated. All structures within 300 feet of building 242 must be included in the evacuation plan. This would include buildings 206, 237, 239, and 244. If the 300 foot distance is increased due to the evaluation required in Section G-4c the rally point identified must be moved out of the evacuation area and additional structures may have to be included in the evacuation plan.

RIA Response:

Section G-7, page 138, addresses the evacuation plan for the Hazardous Waste Container Storage Unit Contingency Plan.

H. PERSONNEL TRAINING: 703.183(1), 724.116

H-1 Outline of the Training Program: 724.116(a)(1)

H-1a Job Title/Job Description: 724.116(d)(1) and (d)(2)

1. Describe what type of specialized experience the Custodial Foreman and the Chief, Defense Reutilization Marketing Office must have in order to qualify for these positions. This description should take into account the responsibilities and duties described in the application for these positions.

2. Describe in detail the specialized experience for the Environmental Protection Specialist. This description should take into account the duties and responsibilities described in the application.

3. Describe the general experience which the material sorter and classifier must have in order to qualify for this position.

4. Identify the meaning of the acronym RTD, which appears on page H-6 of the application.

5. Describe what appropriate experience or additional education is required for the Environmental Coordinator's position.

RIA Response:

Section H-1a, page 152, describes the personnel job descriptions (from Dept. of Army) and job titles for all personnel involved in the storage unit.

H-1c Training Director: 724.116(a)(3), 724.156

Identify what appropriate experience or additional education would be required for persons to qualify for this position.

RIA Response:

Section H-1c, page 162, addresses the education and experience of the current training director. Also addressed is the training director requirements according to OSHA 1910.120.

H-1e Training for Emergency Response: 724.116(a)(3), 724.156

Under the provisions of 29 CFR 1910 (5) FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experienced supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations. Demonstrate that the entire personnel who may respond to an emergency meet the above requirements.

RIA Response:

Section H-1e, page 168, addresses the specific training requirements for emergency response according to OSHA 29 CFR 1910.120.

J. OTHER FEDERAL LAWS: 703.183(t)

Demonstrate compliance with the requirements of applicable Federal laws such as the Clean Air Act, Clean Water Act, the Wild and Scenic Rivers Act, National Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Management Act, and Fish and Wildlife Coordination Act. Provide all relevant documentation.

RIA Response:

Section J, page 178, addresses the requirement of notifying other federal offices of the Part B Permit Application. Letters and copies of the Part B have been sent to the enclosed offices.

K. PART B CERTIFICATION: 703.182

K-1 Facility Certification: 703.182, 702.126

The certification letter must contain the wording required in 35 Ill. Adm. Code 702.126(d), and must be signed by a person meeting the requirements of 702.126.

RIA Response:

Section K-1, page 180, gives the certification letter that the Commanding Officer has signed.

K-2 Engineering Certification: 703.182, Illinois Professional Engineering Act

Technical data, such as design drawings, specifications and engineering studies, must be certified (sealed) by a Professional Engineer who is licensed to practice in the State of Illinois in accordance with Ill. Rev. Stat., par. 5101, Sec. 1 and par. 5119, Sec. 13.1, The engineering certification must specifically list by date, revision number, etc. all documents which are being certified or each document must be sealed by the engineer. Previously noted deficiencies are still applicable.

RIA Response:

Section K-2, page 182, gives the letter signed by the Professional Engineer certifying the documents used in the Application.

K-3 Prior Conduct Certification: Environmental Protection Act

The certification was received in a letter dated 8/30/91 from Richard W. Bregard. This certification must be placed into or referenced in this section.

RIA Response:

Section K-3, page 184, certification form is to be located in this section.

L. CONTINUING RELEASES AT PERMITTED FACILITIES ($3004(U))

Provided a list of all solid waste management units (SWMU) at the facility and the information required in Item L-1 through L-2a. References to other parts of the application must be specific.

RIA Response:

Section L, page 189, provides a Table that lists all of the solid waste management units at RIA.

L-1. Solid Waste Management Units

RIA has not identified all of the SWMU at the facility. The Agency's RFA has identified the following:

- Container satellite accumulation and storage areas -- 38 units.
- Air pollution control equipment -- 14 areas with approximately 98 units.
- Waste water management units -- 6 wastewater units.
- Waste disposal areas -- approximately 10 waste disposal areas.
- The Agency has also identified miscellaneous units such as process areas that have contaminated the environment during the course of their normal operations, i.e. continuous releases from operations, not a one time spill.

Identify each solid management unit at the facility. A solid waste management unit includes any unit which is not a "regulated unit" and may include any of the following:

- Landfill
- Surface impoundment
- Waste pile
- Land treatment unit
- Injection well
- Incinerator
- Injection well
- Incinerator

- Tank (including wastewater treatment units, elementary neutralization units, and tanks used in reuse/recovery operations)

- Container

- Storage area, transfer station or waste recycling operation.

RIA Response:

Section L-1, page 188, provides information not discussed in L, Table 14, page 189; that is, solid waste management units that are not regulated units.

L-1a Characterize the Solid Waste Management Unit

RIA must individually characterize each SWMU at the facility and must identify the following:

- Type of each unit

- Location of each existing or closed unit on the topographic map. (See comment B-2.)

- Engineering drawings for each unit, if available

- General dimensions of each unit

- Dates when the unit was in operation

- Description of the materials or wastes placed in each unit

- Quantity or volume of waste, if known

The following comments pertain to the characterization of the SWMU identified in Table 3-9:

- Table 3-9 identifies "Satellite/Accumulation Areas and 242 Storage Area", "Building 64 and 65", "Building 251". "Building 58", "Building 159", and "Building 254" as transfer stations. It would appear that it would be more correct to identify the type of each unit as drum, tank, underground tank storage or accumulation areas. The air pollution control equipment would also be considered to be SWMUs.

- Map P identifies hazardous waste satellite sites and hazardous waste accumulation areas. Specify the difference between these two types of units.

- Map Q indicates that "Contaminants from Past and Present Industrial Operations" are identified in the map. Is each solid circle a SWMU? Where are the units identified in Table 3-9

located on Map Q? For example, where are the Parallel to Sylvan Slough, Burning Grounds" and the "DRMO Salvage Yard (PCB spills)" located?

- Table 3-9 identifies "Underground Waste Tanks in Building 220" as a SWMU. Map R appears to show 5 tanks in Building 220. Are all 5 tanks SWMUs? Do these tanks handle the same type of waste?

- The location of each SWMU must be clearly identified on a facility map. It may be necessary to use more detailed maps, i.e. maps of a smaller scale than the site wide maps.

- Identify the general dimension of each SWMU. For example, giving average dimensions of 8 ft. by 8 ft. for the satellite accumulation areas of which there are approximately 35 units is not acceptable.

- A more detailed description of each type of waste handled at each SWMU is needed. If the unit handles a hazardous waste, at a minimum identify the EPA waste number and waste stream name.

RIA Response:

Section L-1a, page 188, provides information characterizing the solid waste units and is located in Table 14, page 189.

L-2 Releases

Provide all information available on whether or not any releases have occurred from any of the solid waste management units at the facility. Reasonable efforts to identify releases must be made, even if releases have not been verified. A release may include: spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment. It does not include releases otherwise permitted or authorized under law or discharges into the injection zone of a UIC permitted class I injection well. A one time spill or release is not considered to be a SWMU. However, a one time release from a SWMU must be identified.

For each release from a SWMU identify the SWMU and any associated release(s) and the information required below in Section L-2a.

RIA Response:

Section L-2, page 196, provides information discussing the one-time releases from solid waste management units and is located in Table 17, page 197.

L-2a Characterize Releases

Information on releases from each SWMU must include the following types of available information concerning prior or current releases:

- Date of the release
- Type of waste or constituent released
- Quantity or volume released
- Nature of the release
  - -- Spill
  - -- Overflow
  - -- Ruptured pipe or tank
  - -- Other
- Groundwater monitoring and other analytical data available to describe nature and extent of release. If other than groundwater monitoring date, please describe.
- Physical evidence of distressed vegetation or soil contamination
- Historical evidence of releases such as tanker truck accidents
- Any state, local or federal enforcement actions which may address releases
- Any public citizen complaints about the facility which could indicate a release
- Any information showing the migration of the release.

The following comments pertain to the March 15, 1991 response, pages 77 and 78:

- Identify the SWMU of which groundwater monitoring was initiated. Provide the available data that was collected as a result of the groundwater monitoring.
- Table 3-10 is not adequate because the SWMU at which releases have occurred are not identified.
- Table 3-10 does not identify what enforcement action was taken or who initiated the enforcement.

- For each release from a SWMU describe how the extent of the release was identified. If analytical data was collected to make this determination provide that data.

Attachments: Attachment 1 Procedures to be Utilized in Developing Solid Waste Determination Requests
Attachment 2 Instructions (for) Special Waste Applications

RIA Response:

Section L-2a, page 196, see Table 17, page 197.

Part B-122

Rock Island Co. 161[illegible]0001

USEPA

DEPARTMENT OF THE ARMY
ROCK ISLAND ARSENAL
ROCK ISLAND, ILLINOIS 61299-5000

REPLY TO
ATTENTION OF

SMCRI-SE

08 NOV 1991

Mr. Lawrence W. Eastep
Illinois Environmental Protection Agency
Division of Land Pollution Control -- #24
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276

Dear Mr. Eastep:

We are in receipt of your letter dated October 2, 1991, (Refer to: 1618130001 - Rock Island County, Rock Island Arsenal, IL5210021833, RCRA Permit Log No. B-122) and Notice of Deficiency (NOD) list. We are staffing up the effort to prepare a response to the deficiencies identified in our March 19, 1991, submission.

We respectfully request an extension of the November 15, 1991, deadline to December 13, 1991, based on the following contingencies:

a. We may experience a greater amount of time than that given to prepare new maps and drawings.

b. We may experience a greater amount of time than that given to obtain complete chemical laboratory analysis since generator's user knowledge was used previously.

c. We have not received the 1991 RCRA Facilities Assessment. Our Part B Permit application revision should be checked against this document and modified as necessary before submission.

Should you have any questions concerning this request, please feel free to contact Dr. William Shore, Environmental Coordinator, SMCRI-SEM, telephone (309) 782-7855/7926.

Sincerely,

Derroll S. Hansen
Acting Director, Science and
Engineering Directorate

RECEIVED
NOV 12 1991
IEPA-DLPC

RI-18

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-6762

Refer to: 1618130001 -- Rock Island County
Rock Island Arsenal
IL5210021833
RCRA Permit Log No. B-122

October 2, 1991

Commander
Rock Island Arsenal
Attn: SMCRI - CO, Col. Richard W. Bregard
Rock Island, IL 61299-5000

Dear Colonel Bregard:

The Illinois Environmental Protection Agency has reviewed Rock Island Arsenal's response, dated March 15, 1991 and received March 19, 1991 to the Agency's January 16, 1991 Notice of Deficiency (NOD) regarding the RCRA Part B Application for a hazardous waste container storage unit (S01) at the above referenced facility. A list of deficiencies identified during this second technical review is included in the attached NOD.

Each of the deficiencies must be addressed before this Agency can complete the technical review of your permit application. Your response must be submitted in quadruplicate and postmarked no later than November 15, 1991. The response must be in a format which allows incorporation of the new information into the appropriate sections of your application. To allow for proper review of this new information, the location of the response to each deficiency should be identified in a list cross-referencing these items. Each revised page or drawing must have the revision date identified on them for tracking purposes.

When responding to the deficiencies, RIA must modify the permit application itself. Responding to the noted deficiencies without modifying the permit application, as was done in the March 15, 1991 response, is not acceptable. Any responses which are submitted to the Agency in this format will be rejected. RIA should also review the appendices to the permit application to determine if they are all necessary. For example, Appendix K of the application may not be necessary (see the NOD comment on Section C-3 of the application).

The Agency is concerned that RIA has not been able to prepare an adequate permit application which addresses the many deficiencies noted in the NODs dated June 1, 1990 and January 16, 1991. Failure to adequately respond to the attached deficiencies will result in a issuance of a Notice of Intent to Deny the application for permit.

A certification identical to that outlined in 35 Ill. Adm. Code 702.126 must accompany your submission. The original and three copies of the new information and certification should be submitted to the following address:

Illinois Environmental Protection Agency
Division of Land Pollution Control -- #24
Permit Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

Should you have any questions regarding this subject, please contact Kevin D. Lesko at 217/782-6762.

Very truly yours,

Lawrence W Eastep

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:KDL/mls/0055q/26-27

Attachment: Notice of Deficiency

cc: Peoria Region
Division File, RCRA Permit
Administrative Record, w/enclosure
USEPA Region V -- George Hamper, w/enclosure
USEPA Region V -- Mary Murphy, w/enclosure
Planning & Reporting Section
Dr. William Shore, SMCRI-SEM

Notice of Deficiency
Rock Island Arsenal
Part B Log No. B-122
LPC No. 1618130001
IL5210021833

Second Technical Review
October 2, 1991

The following deficiencies were found during a second technical review of the RCRA Part B permit application submitted for the above-referenced facility (All regulatory references are to 35 Ill. Adm. Code, Subtitle G: Waste Disposal):

A. Part A Application: 702.123, 702.126(a), and (d), 703.181

Evaluate the wastes to be stored in Building 242 to determine if any exhibit the newly identified characteristic of toxicity, D018 through D043 identified in 35 Ill. Adm. Code 721.124. If any of the wastes possess a new characteristic not identified in the present Part A Application, Rock Island Arsenal (RIA) must modify the Part A Application and the Part B Application as appropriate.

B. FACILITY DESCRIPTION

B-1 General Description: 703.183(a)

1. Provide a description and the quantity of each hazardous waste received during the previous calendar year at the storage unit.

2. RIA adequately described the generating process for the six waste streams which were specifically listed in the Agency's January 16, 1991 Notice of Deficiencies (NOD). However, RIA did not address all wastestreams which may be stored in Bldg. 242 -- see Appendix A of RIA's March 15, 1991 Response to Deficiencies. Briefly describe the processes that generate each waste stream which may be stored in the hazardous waste container storage area, Building 242.

B-2 Topographic Map: 703.183(s), 703.185(c), 703.185(d), 724.195, 724.197

B-2a General Map Requirements: 703.183(s)

The maps submitted to identify the location of the solid waste management units (SWMU) are not adequate, see the comments of Items L-1 and L-1a for additional information.

B-4 Traffic Information: 703.183(j)

Provide an estimate of the number and type of vehicles traveling within 1,000 feet of Building 242 each day.

B-5 Operating Record: 724.173

1. Summary reports and details of all incidents that require implementing the contingency plan, as specified in Section 724.156(j), must be included in the record. Describe how this will be done.

2. The total quantity of each hazardous wastestream present in Building 242 should be updated when waste is added to the unit or at a minimum at the end of the day when waste has been added to the unit. The total amount of each wastestream in storage must be available at all times.

3. The results of waste analysis are given in Appendix A of the information submitted March 15, 1991. These results are not an adequate waste analysis as required by Item C-1 below, however, they are adequate for the operating record information set up.

4. All hazardous waste stored within the storage area must be shipped off-site as a hazardous waste under a manifest in accordance with 35 Ill. Adm. Code Parts 722 and 809. The only exception to this requirement would be if RIA can demonstrate, to the Agency's satisfaction, that a given waste does not meet the definition of a solid waste as defined in 35 Ill. Adm. Code Section 721. Such a demonstration must be developed and submitted to the Agency for review and approval as described in the Agency's "Procedures to be Utilized in Developing Solid Waste Determination Request" (Attachment 1).

5. Figure 2-21 is not an inspection log, but rather it is a copy of the operating log. See also Sections F-2a through F-2a(2) of the application and Items F-2a and F-2a(1) below.

6. Item D-1a(2) below relates to the repackaging of the off-specification waste in original containers. Describe how such efforts will be documented in the operating record.

C. WASTE CHARACTERISTICS

C-1 Chemical and Physical Analyses: 703.183(b), 724.113(a)

For each hazardous waste to be stored at the facility, describe the waste, the hazard characteristics, the basis for hazard designation, and provide

a laboratory report detailing the chemical and physical analyses of representative samples. At a minimum, these analyses must contain all the information which must be known to treat, store or dispose of the hazardous wastes properly in accordance with 35 IAC Subtitle G. This information must be provided for the wastestreams identified in the application and any wastestreams identified in carrying out the evaluation required by Item A above.

Provide a copy of the laboratory waste analyses report, on laboratory letterhead and signed by a responsible party of the lab, that details the chemical and physical properties of representative samples of each waste stream. At a minimum, the waste must be analyzed for all of its possible hazardous constituents and the parameters set forth in the Agency's Instructions (for) Special Waste Stream Application revised May 1, 1991 (see Attachment 2). Appendix A of the March 1991 submission does not meet the above requirements. The only exception to the need for laboratory waste analysis reports is for off-specification material that has not been used in any process. Copies of either MSDSs or other published information for each off-spec material to be stored in the unit may be provided in lieu of the laboratory reports.

C-2 Waste Analysis Plan: 703.183(c), 724.113(b) and (c)

C-2a Parameters and Rationale: 724.113(b)(1)

1. List parameters chosen for analysis and explain the rationale for their selection. At a minimum each waste must be analyzed for all its possible hazardous constituents and the parameters set forth in the Agency's special waste stream application instructions (see Item C-1 above).

2. Table 3-2, page C-15 of the application does not list all of the analytical parameters for each waste. For example, Item 2 only lists TCLP for 3 metals and does not include other parameters. In addition, Item 12 has no parameters listed, and Item 25 lists EP toxicity as a parameter. This table must be revised to include all appropriate parameters as indicated in Item C-1 above.

C-2b Test Methods: 724.113(b)(2)

Additional test methods must be identified to reflect changes required by Item C-1 and C-2a above.

C-2c Sampling Methods: 724.113(b)(3), 40 CFR 261 - Appendix I

List the sampling methods used to obtain a representative sample of each waste to be analyzed and document that the chosen method is appropriate for the type and nature of the waste. Pages three-1 to three-5 of SW-846, Volume IA, 3rd Edition (referenced on page 19 of RIA's March 15, 1991 response) refer to the analysis of metal constituents and would therefore not be appropriate for all of the analytical parameters which must be run (such as volatile organic compounds).

C-2d Frequency of Analyses: 724.113(b)(4)

Listed waste must also be tested annually or when there is a change in the generating process. Listed waste must be analyzed for all hazardous constituents which may be present in the waste including the characteristics of hazardous waste as set forth in 35 Ill. Adm. Code 721. For example, F003 paint waste may also be hazardous due to metals and other TCLP parameters.

C-2f Additional Requirements for Ignitable, Reactive or Incompatible Wastes: 724.113(b)(6), 724.117

Each waste must, at a minimum, be classified for compatibility pursuant to (1) 40 CFR 264 Appendix V, (2) pages B9A-9F of USEPA OSWER Document #9938.4 and (3) the procedures set forth in "A Method for Determining the Compatibility of Hazardous Wastes" (EPA 600/12-80-076, April, 1980). The classification of each wastestream must be identified in the application. Depending upon the results of this classification effort, the container storage area may have to be modified to ensure incompatible wastes are properly segregated.

C-2g Waste Analysis Requirements for Land Disposal Ban

35 Ill. Adm. Code 728.104 applies to waste being treated in surface impoundments and would not apply to RIA. RIA must comply with the requirement for generators, i.e. 35 Ill. Adm. Code 728.107(a).

C-3 Quality Assurance: 702.145

RIA need not identify specific laboratories or submit their quality assurance plans as long as the permit application specifies that any outside laboratory used to analyze waste will follow the quality assurance requirements set forth in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," Third Edition (SW-846).

D. PROCESS INFORMATION

D-1 Containers

D-1a Containers with Free Liquids

D-1a(1) Description of Containers: 724.271, 724.272

For each type of container which will or may be placed in the storage area, provide the following information: (1) approximate number of each type of container, (2) construction materials, (3) dimensions and usable volumes, (4) DOT specifications or other manufacturer specifications, (5) liner specifications (if applicable), (6) container condition (new, used, reconditioned), (7) markings and labels, and (8) actual hazardous waste streams to be placed in the container. Identify the name of the wastestream, its EPA identification number, hazard classification and physical state when identifying the actual hazardous waste streams to be placed in each type of container.

The above information will not be required for the original containers holding off-specification material that has never been used, if the off-spec material in the original containers is only accumulated in the storage area until sufficient quantities are available to fill an overpack container. In this case, the above information must be provided for the overpack containers that will be used for off-spec material. Different off-spec wastestreams cannot be placed into the same overpack container unless it can be demonstrated in the application that the off-spec materials are compatible with (1) each other, (2) the overpack containers and (3) all of the other off-spec material containers to be placed in the overpack.

D-1a(2) Container Management Practices: 724.273

1. Describe the container management practices for handling off-spec material in original containers.

2. Provide a detailed description of how the off-spec material and leaking containers will be overpacked, including a description of where the material will be overpacked, any special safety equipment that may be needed, modification of the operating log, etc.

3. If the off-spec material will first be accumulated in Building 242 prior to consolidation (see comment on Section D-1a(1) above), identify how the newly overpacked material will be identified in the

operating record, e.g. initially there may have been 10 containers of material X and after overpacking there may only be one container of material X. This must also be addressed in Section B-5 of the application.

4. Identify the maximum stacking height of off-spec material that may be placed on pallets for storage.

D-1a(3) Secondary Containment System Design and Operation: 703.201(a)(1), 724.275(a) and (d)

Provide design and profile drawings of the container storage area(s) which have been redesigned to reflect the deficiencies noted in Item F-5b below. These drawings must show the secondary containment system and the arrangement of containers. Indicate on the drawings the areas in which incompatible wastes will be stored. Wastes which are incompatible may not be stored within the same secondary containment system. Waste must also be prevented from falling and/or spilling into adjacent containment systems where incompatible materials are stored through the use of barriers or other equivalent means.

D-1a(3)(a) Requirement for the Base or Liner to Contain Liquids: 724.275(b)(1)

A demonstration must be provided regarding the capability of the base of Building 242 to contain liquids. This demonstration must include:

- A statement that the base is free of cracks or gaps;
- A demonstration that the base is impervious to wastes and precipitation;
- A description of the base design and construction, including the materials from which it was constructed;
- An engineering evaluation of the base's structural integrity;
- A discussion of the compatibility of the base with wastes to be stored in the area; and
- A demonstration that the epoxy coatings and joint sealing materials are compatible with the waste to be stored in the storage areas.

D-1a(3)(b) Containment System Drainage: 703.201(a)(2), 724.275(b)(2)

1. If containers are to be stored on the base of the containment system, the base must be sloped or must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation. The design and/or operation of Building 242 must be modified to meet this requirement.

2. If containers are to be placed in cabinets, adequate storage (specifically enough to store all the material in the cabinet) must be available to temporarily store any waste which must be removed from the cabinet to cleanup any observed releases.

D-1a(3)(c) Containment System Capacity: 703.201(a)(3), 724.275(b)(3)

1. Although the containment calculation for the storage area floor is adequate, the secondary containment system itself is not adequate because as currently designed wastes may be stored within the same secondary containment system (see Item C-2f, D-1a(3) and F-5d). Calculations must be provided demonstrating that the containment capacity of the revised secondary containment system meets the requirements of 35 Ill. Adm. Code 724.275(b)(3).

2. Give the dimensions of the secondary containment system of the steel containment cabinets and demonstrate that the system is adequate.

D-1a(3)(e) Removal of Liquids from Containment System: 703.201(a)(5), 724.275(b)(5)

1. Specifically reference the section of the contingency plan which addresses the cleanup of spills and indicate these procedures will be followed when responding to a spill or completely describe the procedures to be followed in removing liquids from the containment system.

2. The response to the previously noted deficiency indicates that Appendix I through M have been added to describe the response procedures for oil, acid, caustic, flammable, combustible liquids and pesticide spills. The following is a list of the titles of Appendices I thru M.

   Appendix I -- "Updated Office Symbols Being Used at the Rock Island Arsenal"

   Appendix J -- "Rock Island Arsenal Hazardous Waste Minimization Plan"

Appendix K -- "Rock Island Arsenal Waste Analysis Plan"

Appendix L -- "Solid Waste Management Unit Reports"

Appendix M -- "Hazardous Waste Disposal Information"

The information in these appendices does not appear to describe how liquids will be removed from the containment system.

F PROCEDURES TO PREVENT HAZARDS

F-1 Security: 703.183(d), 724.114

F-1a(1) 24-Hour Surveillance System: 703.183(d), 724.114(b)(1)

This section is not technically adequate. However, this section is not applicable since the requirements of Sections F-1a(2)(a) and (b) are met.

F-1a(2) Barrier and Means to Control Entry: 724.114(b)

F-1a(2)(a) Barrier: 724.114(b)(2)(A)

The storage building itself is an adequate barrier. Continuous 24-hour monitoring of the area will not be required, provided the doors of the building are locked at all times unless waste is being placed into or taken from the building.

F-1a(2)(b) Means to Control Entry: 724.114(b)(2)(B)

See comment in Item F-1a(2)(a). The locked doors of the storage building are an adequate means to control entry into the storage area.

F-2 Inspection Schedule: 703.183(e), 724.115

F-2a General Inspection Requirements: 703.183(e), 724.115(a) and (b), 724.133

1. Specify where the inspection schedule and inspection log sheet will be kept. The March 15, 1991 response to deficiencies indicates that they will be kept at the facility. Does "facility" refer to Bldg. 242? The Agency defines facility as the entire RIA and Bldg. 242 as the hazardous waste storage unit.

2. The operating log, including the inspection log sheets, should not be kept within the storage area itself. These records should be kept in a location that is accessible in the event of an emergency such as a fire in the storage unit. Since the unit is to be inspected every time it is opened, a convenient location for the log may be the same building where the key to the storage unit is located.

F-2a(1) Types of Problems: 724.115(b)(3)

Table 3-7 should be revised to include inspection of expiration dates of the disposable respirators and cartridges. Fire extinguishers, SCBAs, emergency clothing, eye wash, and safety shower must be inspected for their performance in addition to quantity. The inspection of this equipment for performance must demonstrate that the equipment is usable. Performance inspection of this equipment may not have to be done on a weekly basis.

F-3b Aisle Space Requirement: 724.135

1. The aisle spacing is adequate, however, the secondary containment system is not (see Item D-1a). Therefore, a demonstration must be provided that the aisle space provided in the re-designed system is adequate.

2. Identify the aisle spacing that will be maintained inside the steel containment cabinets. Demonstrate that this spacing meets the requirements of 35 Ill. Adm. Code 724.135.

F-4 Preventive Procedures, Structures and Equipment: 703.183(h)

F-4a Unloading Operations: 703.183(h)(1)

Describe the procedures used when transferring off-spec materials in their original containers to the storage area. See also the comments in Item D-1a(2).

F-4d Equipment and Power Failure: 703.183(h)(4)

In the event of a power outage that affects the telephones, what emergency communication equipment would be available?

F-4e Personal Protective Equipment: 703.183(h)(5)

Appendix A of the March 15, 1991 response identifies the personnel protective equipment (PPE) to be used for each waste stream through the use of identification numbers. Identify what PPE is associated with each identification number. Demonstrate that the PPE chosen is adequate.

F-5 Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes

F-5a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste: 703.183(i), 724.117(a), 724.131

Describe the heating system in Building 242. If the building uses gas heaters, identify what precautions are taken to assure that any flames or heat generated from the system will not cause a fire or reaction in the storage unit.

F-5c Management of Ignitable or Reactive Waste in Containers: 703.201(c), 724.276

Halogenated solvents must be stored separately from ignitable waste, unless RIA can demonstrate in the application that a fire involving the halogenated solvents, e.g. F001 and F002 waste, will not affect areas outside of the facility.

F-5d Management of Incompatible Wastes in Containers: 703.201(d), 724.277

1. If a storage container holds a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, document that the wastes are separated from the other material or protected from them by means of a dike, berm, wall or other device. See Item C-2f above for compatibility classifications. Thus, the container storage area, including its secondary containment system and any associated appurtenances, must be redesigned, as necessary, to ensure incompatible wastes are properly segregated (see also Item D-1a(3) above).

2. If two or more wastestreams may be stored within the same secondary containment area (SCA), demonstrate that all waste which may be stored within a given SCA are compatible with each other. Identify which wastestreams may be stored together within a SCA. Include the wastestream names, their EPA identification numbers, hazard classification and their compatibility classifications (identified in accordance with the documents specified in Section C-2f of this Notice of Deficiencies).

G. CONTINGENCY PLAN: 703.183(g), 724.137, 724.150 through 724.156, 724.152(b)

General Comments:

1. The requirements for the contingency plan have been updated since the last review. Therefore, deficiencies that were not previously noted may be identified.

2. The contingency plan must be prepared as a stand alone document (i.e. the plan must contain all necessary information independent of the rest of the Part B application) as copies of the contingency plan, i.e. Section G, must be sent to all locations emergency response teams that may be called upon to provide emergency services.

G-1 General Information

1. A copy of the site plan (Map A) must be included in the contingency plan. The location of Building 242 within the facility must be identified.

2. The following information must be incorporated into this section of the application:

   a. A list of all hazardous wastes to be managed at the facility (generic name), including the EPA hazardous waste number.

   b. A scaled drawing showing the location of all hazardous waste management units at the facility and all other areas where hazardous waste is handled at the facility (such as loading/unloading areas, etc.). This scaled drawing must also identify the entrances to the facility, roads within the facility and possible evacuation routes;

   c. A description of the types of waste managed at each hazardous waste management unit at the facility;

   d. A description of the procedures used to handle hazardous waste at the facility;

   e. An estimate of the quantity of the various types of hazardous waste which may be present at the facility. An estimate of the typical inventory of hazardous wastes at the facility must also be included.

G-2 Emergency Coordinators: 724.152(d), 724.155

Demonstrate that at least one Emergency Coordinator (EC) will always be present at the facility or on call, i.e. able to reach the facility in a short period of time. Define the length of time that it will take for the EC to reach the facility. The length of time that the EC will have to respond to an emergency will depend on how quickly he/she must implement the plan in order to minimize adverse effects on human health and the environment. This may require that an EC be present on-site at all times, i.e. immediately available. This will depend in part on your responses to Items G-4C and G-6.

A statement authorizing the coordinator to commit all necessary resources to the plan must be provided. The EC must be authorized to immediately, without approval from other persons, commit necessary resources from both on and off site to implement the contingency plan. This authorization statement must be signed by persons meeting the signatory requirements set forth in 35 Ill. Adm. Code 702.126.

Section G-2.3, page G-3, indicates that manpower will be supplied by the generator's organization. The personnel must be trained as required by 29 CFR 1910 OSHA's Hazardous Waste Operations and Emergency Response Standards.

G-3 Implementation: 724.151(b), 724.152(a), 724.156(d)

The contingency plan must be implemented for a spill, fire, explosion or release of any size unless it can be demonstrated in the application that a specific release will not affect areas outside of the unit. If this demonstration is made, a description of the criteria that the EC will use to decide if the contingency plan will be implemented must be provided.

G-4 Emergency Response Procedures: 724.156

Development of an adequate contingency plan requires that an evaluation be conducted of the facility's hazardous waste management activities, including potential emergency situations (release, fire or explosion) and the consequences of these emergency situations. At a minimum, the information which must be evaluated in developing the contingency plan includes:

1. The type, amount and variety of waste managed in each hazardous waste management unit (HWMU) at the facility;

2. The location of the waste within each HWMU and within the facility overall;

3. Waste handling practices;

4. Possible hazards which may result from a release, fire or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). This requires an estimation of the types and quantities of gases that can be generated. The evaluation of these hazards may require the use of commercially available models to simulate what may happen in the event of an emergency;

5. The effects of weather conditions in the event of a release, fire or explosion;

6. The extent of the area (on-site and off-site) impacted by a release, fire or explosion. This may require use of commercially available models;

7. The information required by the emergency coordinator (EC) to determine if a release, fire or explosion could threaten human health or the environment outside the facility.

   a. The information and criteria to be used by the EC in making this determination must be provided in the plan. Simply stating that the EC will make a determination at the time of the emergency is not adequate.

   b. The time required to make such a determination should be compared with the time it takes for the emergency to have an off-site impact. This will give some indication of the "reaction time" available in the event of an emergency.

8. The information required by the EC to determine if evacuation of local areas is advisable.

   a. The information and criteria to be used by the EC in making this determination must be provided in the plan. Simply stating that the EC will make a determination at the time of the emergency is not adequate;

b. The time required to make such a determination should be compared with the time it takes for the emergency to have an off-site impact. This will give some indication of the "reaction time" available in the event of an emergency.

9. The person the EC should notify if evacuation of the local area is determined to be advisable.

10. The capabilities of the on-site emergency response system, the capabilities of the off-site emergency response entities (training, equipment, availability, etc.), and the agreements/arrangements made with state and local emergency response entities.

A report should be provided as an appendix to the application demonstrating that this information was evaluated and utilized in developing the contingency plan.

G-4a Notification: 724.156(a)

Describe the methodology for immediate notification of the necessary state or local agencies. Page 49, Section G-4, of RIA's March 15, 1991 response indicates that "The EC shall immediately notify either the government official designated as the on-scene coordinator for that geographical area, . . . or the Nation Response Center . . ." This notification procedure must be moved into Section G-4a. Specify who the EC will notify. If the EC will notify the on-scene coordinator, identify the person and the appropriate phone number(s).

The EC must also notify:

- The IEPA Emergency Response Unit
- The Illinois Emergency Services and Disaster Agency
- All local police and fire departments, hospitals, and emergency response teams identified in Section G-6.

G-4b Identification of Hazardous Materials: 724.156(b)

Describe procedures to identify the character, exact source, amount and areal extent of any released material involved in the emergency. When making this evaluation the EC should also consider information provided by persons discovering the fire, spill, explosion or release.

G-4c Assessment: 724.156(c) and (d)

To properly respond to an emergency, the EC must identify the character, source and amount of waste involved in the emergency. Concurrently, the EC must also assess the possible hazards to human health or the environment resulting from the emergency. This assessment must consider (1) direct and indirect health and/or environmental effects of the emergency and (2) the extent of the area which will be impacted by the emergency. The area of impact of a release is of great importance because it will normally be used to determine the size of the area which must be evacuated.

Due to the fact that there will be limited time to properly assess hazards during an emergency, the contingency plan must describe in detail the information and criteria the EC will use in assessing (1) effects on human health and the environment and (2) the area which may be impacted by the emergency. Specifically, the contingency plan must describe the hazards associated with releases and fires involving the various hazardous wastes managed at the facility and the area impacts of such emergencies. The information which must be incorporated into the contingency plan includes:

a. The information listed below pertaining to the various chemical and physical properties of each hazardous waste managed in the unit. If the waste is a mixture of materials for which the mixture's properties listed below have not been identified, provide the information listed for as many of the individual components of the mixture as possible along with its percentage.

   Compound Name
   USEPA Hazardous Waste No.
   IDLH
   TLVs, (TLV-TWA, TLV-STEL, TLV-C)
   Vapor Pressure @ 68°F and 100°F
   Upper and Lower Explosion Limits
   Boiling Point
   Specific Gravity
   NFPA Designation (flammable or combustible)
   Material Safety Data Sheets
   Other Appropriate Characteristics (such as reactive class, etc.)
   USDOT Classification

b. An identification of the products of incomplete combustion associated with (1) flammable or combustible hazardous wastes managed at the facility and (2) wastes managed at the facility which are hazardous

due to the characteristics of ignitability (D001) or reactability (D003).

c. An evaluation of the hazards associated with a release or possible fire involving the various hazardous wastes which may be managed at the facility.

d. An evaluation of the area which may potentially be impacted during a release or possible fire involving the various hazardous wastes managed at the facility.

This evaluation must identify the onsite area which must be evacuated in the event of a spill, fire, release, etc. Demonstrate that the area to be evacuated is adequate to protect human health.

G-4d Control Procedures: 724.152(a)

1. The area to be evacuated must be modified if the results of the evaluation required above in Item G-4c indicate that it differs from the 300 feet specified in this section.

2. Demonstrate that the type of respiratory protection and protective garments to be used in the cleanup or spills is adequate for all types of waste stored in the unit. If the protective equipment is not compatible with all of the waste streams, describe how the correct equipment is chosen during an emergency.

G-4e Prevention of Recurrence or Spread of Fires, Explosions, or Releases: 724.156(e)

Following the occurrence of a fire, explosion, or release, RIA should evaluate the cause(s) of the problem and modify the operating procedures, design of the unit, etc. in order to prevent recurrence of the problem, if possible.

G-4i Container Spills and Leakage: 724.152, 724.271

Specify procedures to be used when responding to container spills or leakage, including procedures and timing for expeditious removal of spilled waste and repair or replacement of the container(s). See Item G-4d above.

G-6 Coordination Agreement Requirements: 724.137, 724.152(c), 724.153(b)

The response to many emergencies which only have on-site impacts and to all emergencies which have off-site impacts require the involvement of the local fire and policy departments, as well as other local emergency response entities (local Emergency Services and Disaster Agency coordinator, local hospital, etc.). Appropriate response to such emergencies requires close coordination and cooperation with these entities. Such a relationship can only be established through prior planning and developing and updating agreements between these entities and the facility. According to 35 Ill. Adm. Code 724.152(c), the contingency plan must describe the arrangements agreed to by the facility and local police departments, fire departments hospitals, contractors and state/local emergency response teams to coordinate services needed during an emergency at the facility. Pursuant to 35 Ill. Adm. Code 724.137, the facility must attempt to:

a. Make arrangements to familiarize police, fire departments and emergency response teams with the layout of the facility, properties of hazardous wastes handled at the facility and associated hazards, places where facility personnel would normally be working, entrances to and roads inside the facility and possible evacuation routes;

b. Establish agreements designating primary emergency authority to a specific police and a specific fire department, where more than one police and fire department might respond to an emergency. Agreements should also be made with the other surrounding police and fire departments to provide support to the primary emergency authorities.

c. Establish agreements with state emergency response teams, emergency response contractors and equipment suppliers;

d. Make arrangements to familiarize local hospitals with the properties of the hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions or releases at the facility.

The facility should also attempt to develop emergency plans and coordination agreements with the state and local emergency entities identified above. The detail of the arrangements and agreements made with the local and state emergency entities will be dependent upon the types of wastes handled at the facility and the potential need for the services of the various entities. In addition, the facility must also conduct annual meetings with the entities identified above to review the agreements and

the facility's operations and to discuss any change in the facility or its contingency plan.

Given the above requirements and recommendations, the RCRA Part B permit application must either (1) describe in detail the arrangements and agreements made with each of the local and state emergency entities identified above (required by 35 Ill. Adm. Code 724.137) or (2) contain written documentation that the entity refused to enter into such arrangements/agreements.

To properly familiarize the emergency response entities identified above with this facility, the information which follows must be provided to the local fire department, the local police department and all other agencies identified in 35 Ill. Adm. Code 724.153(b) (note that this information must be provided to these entities to ensure the requirements of 35 Ill. Adm. Code 724.137 are met):

a. A list of all hazardous wastes to be managed at the facility (generic name), including the EPA hazardous waste number;

b. A scaled drawing showing the location of all hazardous waste management units at the facility and all other areas where hazardous waste is handled at the facility (such as loading/unloading areas, etc.). This scaled drawing must also identify the entrances to the facility, roads within the facility and possible evacuation routes;

c. A description of the types of hazardous waste managed at each hazardous waste management unit at the facility;

d. A description of the procedures used to handle hazardous waste at the facility;

e. An estimate of the quantity of the various typer or hazardous wastes which may be present at the facility. An estimate of the typical inventory of hazardous wastes at the facility must also be included;

f. The following information regarding the properties of the hazardous wastes managed at the facility:

   Name
   USEPA Hazardous Waste No.
   IDLH
   TLVs (TLV-TWA, TLV-STEL, TLV-C)
   Vapor Pressure at 68 F (20 C)

NFPA Designation (flammable or combustible)
Material Safety Data Sheets
Other appropriate characteristics (such as reactive class, etc.)
USDOT classification

g. An identification of the products of incomplete combustion associated with (1) flammable or combustible hazardous wastes managed at the facility and (2) wastes managed at the facility which are hazardous due to the characteristic of ignitability (D001) or reactivity (D003).

The application must contain the information identified above and must also contain documentation that this information has been provided to the appropriate entities. In addition, documentation must also be provided that the local emergency response entities identified above have been provided with the most recent copy of the facility's contingency plan.

G-7 Evacuation Plan: 724.152(f)

Map L was located, however, in the March 15, 1991 response Map L is the Flood Insurance Rate Map. The identification of one of these maps should be changed so the application will not have two different maps with the same identification. Please note that the drawing depicting the evacuation plan must be included in the contingency plan.

Page 56 of the March 15, 1991 response indicates that an area of at least 300 feet around Building 242 will be evacuated. All structures within 300 feet of building 242 must be included in the evacuation plan. This would include buildings 206, 237, 239, and 244. If the 300 foot distance is increased due to the evaluation required in Section G-4c the rally point identified must be moved out of the evacuation area and additional structures may have to be included in the evacuation plan.

H. PERSONNEL TRAINING: 703.183(1), 724.116

H-1 Outline of the Training Program: 724.116(a)(1)

H-1a Job Title/Job Description: 724.116(d)(1) and (d)(2)

1. Describe what type of specialized experience the Custodial Foreman and the Chief, Defense Reutilization Marketing Office must have in order to qualify for these positions. This description should take into account the responsibilities and duties describe in the application for these positions.

2. Describe in detail the specialized experience for the Environmental Protection Specialist. This description should take into account the duties and responsibilities described in the application.

3. Describe the general experience which the material sorter and classifier must have in order to qualify for this position.

4. Identify the meaning of the acronym RTD, which appears on page H-6 of the application.

5. Describe what appropriate experience or additional education is required for the Environmental Coordinator's position.

H-1c Training Director: 724.116(a)(2)

Identify what appropriate experience or additional education would be required for persons to qualify for this position.

H-1e Training for Emergency Response: 724.116(a)(3), 724.156

Under the provisions of 29 CFR 1910 (51 FR 15,654, December 19, 1986), cleanup operations must meet the applicable requirements of OSHA's Hazardous Waste Operations and Emergency Response standard. These requirements include hazard communication, medical surveillance, health and safety programs, air monitoring, decontamination and training. General site workers engaged in activities that expose or potentially expose them to hazardous substances must receive a minimum of 40 hours of safety and health training off site plus a minimum of three days of actual field experience under the direct supervision of a trained experiences supervisor. Managers and supervisors at the cleanup site must have at least an additional eight hours of specialized training on managing hazardous waste operations. Demonstrate that the onsite personnel who may respond to an emergency meet the above requirements.

J. OTHER FEDERAL LAWS: 703.183(t)

Demonstrate compliance with the requirements of applicable Federal laws such as the Clean Air Act, Clean Water Act, the Wild and Scenic Rivers Act, National Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Management Act, and Fish and Wildlife Coordination Act. Provide all relevant documentation.

K. PART B CERTIFICATION: 703.182

K-1 Facility Certification: 703.182, 702.126

The certification letter must contain the wording required in 35 Ill. Adm. Code 702.126(d), and must be signed by a person meeting the requirements of 702.126.

K-2 Engineering Certification: 703.182, Illinois Professional Engineering Act

Technical data, such as design drawings, specifications and engineering studies, must be certified (sealed) by a Professional Engineer who is licensed to practice in the State of Illinois in accordance with Ill. Rev. Stat., par. 5101, Sec. 1 and par. 5119, Sec. 13.1. The engineering certification must specifically list by date, revision number, etc. all documents which are being certified or each document must be sealed by the engineer. Previously noted deficiencies are still applicable.

K-3 Prior Conduct Certification: Environmental Protection Act

The certification was received in a letter dated 8/30/91 from Richard W. Bregard. This certification must be placed into or referenced in this section.

L. CONTINUING RELEASES AT PERMITTED FACILITIES [§3004(U)]

Provided a list of all solid waste management units (SWMU) at the facility and the information required in Item L-1 through L-2a. References to other parts of the application must be specific.

L-1. Solid Waste Management Units

RIA has not identified all of the SWMU at the facility. The Agency's RFA has identified the following:

- Container satellite accumulation and storage areas -- 38 units.
- Air pollution control equipment -- 14 areas with approximately 98 units.
- Waste water management units -- 6 waste water units.

- Waste disposal areas -- approximately 10 waste disposal areas.
- The Agency has also identified miscellaneous units such as process areas that have contaminated the environment during the course of their normal operations, i.e. continuous releases from operations, not a one time spill.

Identify each solid waste management unit at the facility. A solid waste management unit includes any unit which is not a "regulated unit" and may include any of the following:

- Landfill
- Surface impoundment
- Waste pile
- Land treatment unit
- Injection well
- Incinerator
- Tank (including wastewater treatment units, elementary neutralization units, and tanks used in reuse/recovery operations)
- Container
- Storage area, transfer station or waste recycling operation.

L-1a Characterize the Solid Waste Management Unit

RIA must individually characterize each SWMU at the facility and must identify the following:

- Type of each unit
- Location of each existing or closed unit on the topographic map. [See comment B-2.]
- Engineering drawings for each unit, if available
- General dimensions of each unit

- Dates when the unit was in operation
- Description of the materials or wastes placed in each unit
- Quantity or volume of waste, if known

The following comments pertain to the characterization of the SWMU identified in Table 3-9:

- Table 3-9 identifies "Satellite/Accumulation Areas and 242 Storage Area", "Building 64 and 65", "Building 251", "Building 58", "Building 159", and "Building 254" as transfer stations. It would appear that it would be more correct to identify the type of each unit as drum, tank, underground tank storage or accumulation areas. The air pollution control equipment would also be considered to be SWMUs.
- Map P identifies hazardous waste satellite sites and hazardous waste accumulation areas. Specify the difference between these two types of units.
- Map Q indicates that "Contaminants from Past and Present Industrial Operations" are identified in the map. Is each solid circle a SWMU? Where are the units identified in Table 3-9 located on Map Q? For example, where are the "Parallel to Sylvan Slough, Burning Grounds" and the "DRMO Salvage Yard (PCB spills)" located?
- Table 3-9 identifies "Underground Waste Tanks in Building 220" as a SWMU. Map R appears to show 5 tanks in Building 220. Are all 5 tanks SWMUs? Do these tanks handle the same type of waste?
- The location of each SWMU must be clearly identified on a facility map. It may be necessary to use more detailed maps, i.e. maps of a smaller scale than the site wide maps.
- Identify the general dimension of each SWMU. For example, giving average dimensions of 8 ft. by 8 ft. for the satellite accumulation areas of which there are approximately 35 units is not acceptable.
- A more detailed description of each type of waste handled at each SWMU is needed. If the unit handles a hazardous waste, at a minimum identify the EPA waste number and wastestream name.

L-2 Releases

Provide all information available on whether or not any releases have occurred from any of the solid waste management units at the facility. Reasonable efforts to identify releases must be made, even if releases have not been verified. A release may include: spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment. It does not include releases otherwise permitted or authorized under law or discharges into the injection zone of a UIC permitted class I injection well. A one time spill or release is not considered to be a SWMU. However, a one time release from a SWMU must be identified.

For each release from a SWMU identify the SWMU and any associated release(s) and the information required below in Section L-2a.

L-2a Characterize Releases

Information on releases from each SWMU must include the following types of available information concerning prior or current releases:

- Date of the release
- Type of waste or constituent released
- Quantity or volume released
- Nature of the release
  - -- Spill
  - -- Overflow
  - -- Ruptured pipe or tank
  - -- Other
- Groundwater monitoring and other analytical data available to describe nature and extent of release. If other than groundwater monitoring data, please describe.
- Physical evidence of distressed vegetation or soil contamination
- Historical evidence of releases such as tanker truck accidents
- Any state, local or federal enforcement actions which may address releases

- Any public citizen complaints about the facility which could indicate a release

- Any information showing the migration of the release.

The following comments pertain to the March 15, 1991 response, pages 77 and 78:

- Identify the SWMU of which groundwater monitoring was initiated. Provide the available data that was collected as a result of the groundwater monitoring.

- Table 3-10 is not adequate because the SWMU at which releases have occurred are not identified.

- Table 3-10 does not identify what enforcement action was taken or who initiated the enforcement.

- For each release from a SWMU describe how the extent of the release was identified. If analytical data was collected to make this determination provide that data.

Attachments: Attachment 1 Procedures to be Utilized in Developing Solid Waste Determination Requests
Attachment 2 Instructions (for) Special Waste Applications

KL/mls/sp0055q/1-25

1 122 Part B

USEPA

DEPARTMENT OF THE ARMY
ROCK ISLAND ARSENAL
ROCK ISLAND, ILLINOIS 61299-5000

March 18, 1991

REPLY TO
ATTENTION OF:

SMCRI-SE

Mr. L.W. Eastep, P.E., Manager
Illinois Environmental Protection Agency
Division of Land Pollution Control -- #24
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276

Refer to: 1618130001 -- Rock Island County
Rock Island Arsenal
IL5210021833
RCRA Permit Log No. B-122

Dear Mr. Eastep:

The Environmental Coordinator for the Rock Island Arsenal has reviewed your Notice of Deficiency (NOD) for the Rock Island Arsenals's Part B Permit Application for a hazardous waste container (S01) storage area.

Each of the deficiencies have been addressed in the enclosure, and the deficiency responses are submitted in quadruplicate.

The deficiency responses are separated into individual sections for insertion into the original submission. A list of deficiencies and the corresponding page numbers in the enclosure is provided. Revised drawings and maps have the revision date identified.

A certification identical to that outlined in 35 Ill. Adm. Code 702.136 accompanies this submission.

The final revision of the Part B application will be executed once the responses to the NOD's herewith submitted have been approved by your office.

Please direct any questions or comments to Dr. William Shore, Environmental Coordinator, Rock Island Arsenal, (309) 782-7854/7926. The address is: Commander, Rock Island Arsenal, ATTN: SMCRI-SEM (Dr. William Shore), Rock Island, Illinois 61299-5000.

Sincerely,

Achiel M. Dupont, Jr.
Director, Science and
Engineering Directorate

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Enclosures

10

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Rock Island Arsenal
1618130001 -- Rock Island County
IL5210021833
B-122
January 16, 1991
Response March 15, 1991

Notice of Deficiencies

Initial Technical Review

Subject Requirement: 35 Illinois Administration Code Subtitle G

B. FACILITY DESCRIPTION

B-1 General Description: 703.183(a)

Briefly describe the processes that generate each hazardous waste at the facility, such as the following:

- Waste Flammables
- W.W.T. Sludge
- Solvents
- Alkaline Derust Sludge
- Quench Wastewaters and Sludge
- Cleaning Compounds

Response:

The processes that generate hazardous wastes at the Rock Island Arsenal are described in the following:

- Waste Flammables - Waste flammables can be generated in processes such as waste petroleum naphtha from cold cleaning tanks located in machining, assembly, engineering support and specialty manufacturing operations.

- Waste Water Treatment (WWT) - Sludges are generated in two process; i.e., the WWT facility that removes paint from the paint booth, building 208, and the WWT facility that removes the precipitated electroplating metals from rinse water, building 212.

- Solvents - Waste solvents can be generated from processes such as machining, assembly, metal finishing, engineering support, and specialty manufacturing operations.

- Alkaline Derust Sludge - Alkaline derust sludges can result from metal finishing operations such as electroplating, painting, assemble, and engineering support.

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- Quench wastewaters and Sludges - Quench wastewaters and sludge can be generated in metallurgical operations such as found in the Heat Treating operations, building 222.

- Cleaning Compounds - Cleaning compound wastes can be generated in operations such as metal finishing, machining, assemble, engineering support, and specialty manufacturing operations.

Rock Island Arsenal
1618130001 -- Rock Island County
IL5210021833
B-122
January 16, 1991
Response March 15, 1991

B-2 Topographic Map: 703.183(s), 703.185(c), 703.185(d), 724.195, 724.197

B-2a General Map Requirements: 703.183(s)

The following deficiencies were noted with the maps submitted to meet the map requirements:

- Every map must include a legend which identifies all relevant information. The legend must identify the symbols and line types used to identify items such as facility boundaries, sewers (storm, sanitary, process, etc.), fire hydrants, etc.

- Figure 2-2, page B-19 is not adequate to define the facility boundaries. Clearly define the facility boundaries on a smaller scale map such as Map A, page B-31.

- Provide a legend which identifies how storm sewers and sanitary sewers are distinguished on Map B, page B-31.

- The elevations of the contours of Map D, page B-33 are unreadable.

- The scale of Map A, page 30 is 1 inch equals 500 feet, not 1 inch equals 400 feet as stated on page B-5.

- Describe how the surface flow collected by the dirt embankment (see page B-5) is handled, i.e. how is the water released, and where is it released to.

- Identify all SWMU and hazardous waste units at the site (RIA).

- Map dates are needed on Maps F through I (pages 35-38).

Response:

The revised Maps and descriptions are given as follows:

Map A: POST MAP (Revised March 91) - A general map showing the location of the facility boundary, buildings, and the 1000-foot radius around Building 242.

Map B: STORM DRAINAGE (Revised March 91) - A map indicating the storm drains located within the 1000-foot radius of Building 242.

Map C: SANITARY SEWERS (Revised March 91) - A map indicating the sanitary drains located within the 1000 foot radius of Building 242.

Map D: WATER DISTRIBUTION SYSTEM (Revised March 91) - A map indicating the water distribution system within the 1000 foot radius of Building 242.

Map E: SURFACE CONTOURS - FLOOD PLAIN 100 YEARS (Revised March 91) - A topographical map of the locations within the 1000 foot radius of Building 242 (Revision of previous Map D, J, and K).

Map F: MONITORING WELLS (Revised March 91) - A general map showing the monitoring wells located within the 1000 foot radius of Building 242 (Revised previous Maps E and F).

Map G: LAND USE (Revised March 91) - A general map indicating the land use within the Rock Island Arsenal boundary.

Map H: TRAFFIC PLAN (Revised March 91) - A general map indicating the traffic plan within the 1000 ft radius of Building 242 (replaces Figures 2-7, 2-8, 2-9, and 2-10).

Map I: AIR POLLUTION PERMIT LOCATIONS (Revised March 91) - A general map indicating the air pollution permit locations on the Rock Island Arsenal.

Map J: WASTE CLASSIFICATION PLAN (Revised March 91) - A general map of the Hazardous Waste Storage Facility's Waste Classification Plan (replaces Figure 2-16).

Map K: FLOOD INSURANCE RATE R.I. COUNTY (Revised March 91) - A general map, known as the Flood Insurance Rate Map, provided by Rock Island County, Rock Island, IL.

Map L: FLOOD INSURANCE RATE MAP (Revised March 91) - A general map, known as the Flood Insurance Rate Map, provided by Rock Island County, Rock Island, IL.

Map M: BUILDING 242 AS BUILT PLAN & DETAILS (Revised March 91) - A general map of Building 242, the Hazardous Waste Storage Facility, labeled as built, plan and details (replaces Figure 2-18).

Map N: BUILDING 242 FLOOR SLAB PLANS & DETAILS (Revised March 91) - A general map of Building 242, the floor slab plan and details modification for hazardous waste storage (replaces Figure 2-19).

Map O: BUILDING 242 LOADING DOCK PLAN & DETAILS (Revised March 91) A general map of Building 242 loading dock plan and details (replaces Figure 2-20).

Map P: HAZARDOUS WASTE SATELLITE SITE & ACCUMULATION AREAS (Revised March 91) - a general map of the location of hazardous waste satellite and accumulation areas for the Rock Island Arsenal.

Map Q: SOLID WASTE MANAGEMENT UNITS OPERATING PRIOR TO 1991 (Revised March 91) - A general map of the locations of the solid waste management units' operations prior to 1991.

Map R: UNDERGROUND STORAGE TANKS (USTs) (Revised March 91) - A general map of the location of underground storage tanks (USTs) on Rock Island Arsenal.

The following map deficiencies have been corrected, and the maps are being resubmitted to meet the map requirements:

- All maps have been revised and legends have been added as required including symbols and line types. Additional maps have been added or consolidated.

- Facility boundaries have been added on Map A, Post Map, as requested.

- Storm drainage and sanitary sewers are now on two maps with legends for each:

  - Map B, Storm Drainage, shows the storm sewers within 1000 feet of Building 242.

  - Map C, Sanitary Sewers, shows the sanitary sewers within 1000 feet of Building 242.

- The elevations of the contours of Map D, page B-33, have been redone to provide a legible map.

- Portions of the dirt embankment (1965 flood protection dike) still remain, but as the contours show, surface water flows south to the river or the wet land to the east. There is no entrapment. Reference to dirt embankment on page B-5 will be removed from the text.

- Enclosed are the following Solid Waste Management Units (SWMUs) and Hazardous Waste Units (HWUs) which will be added to the text:

a. Satellite Sites/Accumulation Areas (Map P)
b. Solid Waste Management Units, old and current (Map Q)
c. Underground Storage Tanks (USTs) (Map R)
d. Monitoring Wells (within 1000 feet) (Map F)
e. Air Pollution Permit Locations (Map I)

All maps were revised March 1991 and have been dated.

B-3c Other Location Requirements: Section 21(1) of the Illinois Environmental Protection Act

The Part B permit is for storage only not disposal, therefore this section does not apply.

Sections IB-3c.1 Access Control (page B-8), IB-3c.2 Emergency Equipment (page B-9), IB-3c.3 Coordination Agreements (page B-9), and IIB-3c Access Control (page B-15) must be placed in their appropriate sections in accordance with the Agency's RCRA Part B Permit Application Decision Guide.

Response:

This section is not applicable for this Part B permit application because the Rock Island Arsenal shall not engage in disposal of hazardous wastes. This Part B permit application only pertains to the operation of the hazardous waste management facility, Building 242, for storage of hazardous wastes.

Section IB-3c.1, "Access Control", shall be:

1. Renamed to Section IB-3c(1)
2. Moved and merged with IIB-3c

Section IB-3C.2, "Emergency Equipment" shall be:

1. Renamed to Section IIB-3c(2)
2. Moved and merged with IIB-3c

Section IB-3c.3, "Coordination Agreements" shall be:

1. Renamed to Section IIB-3c(3)
2. Moved and merged with IIB-3c

B-4 Traffic Information: 703.183(j)

Provide an estimate of the volumes including number and types of vehicles traveling within a 1,ØØØ feet of Building 242.

Response:

An estimate of traffic flow and patterns within 1ØØØ feet of Building 242, including the evacuation plan, is shown on Map H.

Traffic Volume and Type - The "Traffic and Parking Study," July 1986, U.S. Army Corps of Engineers, Appendix N, reported traffic volumes for 15 key roadway location. Intersection approach volumes were measured for a minimum of 24 hours at each location to measure peak hour volumes and to measure average daily traffic (ADT). Automatic machine counters were used for periods of time ranging from 24 to 96 hours. The machine counts were obtained at the following locations:

- Ft. Armstrong/Rock Island Avenues Intersection

  Rock Island Avenue - Northbound, 24 hours
  Rock Island Avenue - Southbound, 24 hours
  Ft. Armstrong Avenue - Southbound, 24 hours

- Rodman/Rock Island Avenues Intersection

  Rock Island - Northbound, 96 hours
  Rodman - Westbound, 24 hours
  Rodman - Eastbound, 72 hours

- Rodman/Gillespie Avenues Intersection

  Gillespie - Northbound, 24 hours
  Gillespie - Southbound, 24 hours
  Rodman - Westbound, 24 hours

- Rodman/East Avenues Intersection

  East Northbound, 24 hours
  East Southbound, 24 hours
  Rodman - Westbound, 24 hours

- Moline Bridge/Rodman/King Avenues Intersection

  King Drive - Southbound, 24 hours
  Rodman - Westbound, 96 hours

The results of the machine counts are tabulated in Table B-1, Summary of Machine Counts, page 24, Appendix N.

Referencing Map B-30, the roads that are utilized by vehicular travel within 1000 feet of Building 242 are:

Kingsbury Avenue (South)
Sylvan Drive (East)
Rodman Avenue (North)

There are no roads within 1000 feet to the west. The traffic counts for these roads are:

Roadway	Traffic Count a.m.	Traffic Count p.m.	Vehicles/Day
Kingsbury Avenue	254	24	278
Sylvan Drive	136	5	141
Rodman Avenue	3016	3265	6281

The traffic and parking study defined the overall vehicular traffic entering and exiting the RIA installation utilizing the following bridges:

	a.m.	p.m.	Total
U.S. Government Bridge	1610	1610	3220
R.I. Viaduct	950	815	1800
Moline Bridge	1040	1040	2080
Total	3600	3465	7100

Currently, the employee work force at RIA numbers 8,527. The traffic information should be representative for the present conditions. The most recent tabulation does not differentiate between autos, car-pool vans, buses, and trucks entering and exiting the RIA. Future traffic studies shall include in its determination the above described differentiation of vehicular traffic.

The traffic control signs, signals, and procedures for the affected intersections are:

Sylvan Drive and Kingsbury Avenue - This intersection controlled by stop signs on Sylvan Drive.

Sylvan Drive and Rodman Avenue - This intersection is controlled by traffic lights operated 24 hours per day.

Kingsbury Avenue and Rock Island Avenues - This intersection is control- by traffic lights 24 hours per day. Additionally, Kingsbury Avenue traffic is affected due to the limited hours of operation (Ø5ØØ - 24ØØ) of the gate located at the intersection of Rock Island and Ft. Armstrong Avenues.

B-5 Operating Record: 724.173

Describe the information which will be documented in the operating record including the following:

1. A description and the quantity of each hazardous waste received, and the method or methods and date or dates of its treatment, storage or disposal at the facility as required by 40 CFR 264, Appendix I.

2. The location of each hazardous waste within the facility and the quantity at each location.

3. Records and results of waste analyses performed as specified in Sections 724.113, 724.117, 724.414 and 724.441, and in 35 ILL. Adm. Code 728.104(a) and 728.107;

4. Summary reports and details of all incidents that require implementing the contingency plan as specified in Section 724.156(j);

5. Records and results of inspections as required by Section 724.115(d);

6. A certification by the permittee, no less often than annually: that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that the permittee generates, to the degree the permittee determines to be economically practicable; and that the proposed method of treatment, storage or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health and the environment.

7. Records of the quantities (and date of placement) for each shipment of hazardous waste placed in land disposal units under an extension of the effective date of any land disposal restriction granted pursuant to 35 Ill. Adm. Code 728.105, a petition pursuant to 35 Ill. Adm. Code 728.106 or a certification under 35 Ill. Adm. Code 728.108, and the applicable notice required of a generator under 35 Ill, Adm. Code 728.107(a).

8. For an on-site storage facility, the information contained in the notice (except the manifest number), and the certification and demonstration if applicable, required of the generator or the owner or operator under 35 Ill. Adm. Code 728.107 or 728.108.

Response:

1. and 2. The operating record is maintained in computer form. A storage record operating log provides the actual wastes stored in Building 242 at any time. A copy is available in the building.

The storage record operating log, Figure 2-11 (page B-28), includes the following columns:

Column 1 - The drum is a 7-digit number consisting of the 4-digit cost center generating the waste and a 3-digit drum number.

Column 2 - The top number is a disposal turn-in document number (DTID). The bottom entry is the national stock number (NSN) or the local stock number (LSN).

Column 3 - The generator data consists of the organization symbol and name of the person turning in the waste, also the building number where the waste is from and the generator's phone number.

Column 4 - Description of contents is the name of waste and type of operation is the process description, if available.

Column 5 - Physical form is either solid, liquid, semisolid, or gas. EPA code is entered if available.

Column 6 - The EPA hazardous waste number is entered in this column.

Column 7 - The Wt/Vol is how many pounds or gallons of waste is stored per entry. the value/symbol is a description of the container the waste is in; i.e., tubes, pint container, 55 gallon drum, kit, etc.

Column 8 - The storage date and location refers to the date the waste went into Building 242 and the physical location of the waste inside the building.

Column 9 - The disposal manifest number is entered in this column.

Column 10 - The shipped date is the date the waste was removed from Building 242 and shipped off the installation for disposal.

3. The records and results of the waste analyses for each waste are given in Appendix A.

5. Records and results of inspections of Building 242 are given in Figure 2-21.

6. When a waste is manifested and shipped off-site, the document and the shipping date are recorded and a new storage record is generated and placed in the building. If the location of a drum is changed, the document is likewise updated. Every manifest includes the following certification:

> "I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
>
> If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimized the present and future threat to human health and the environment, or if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford."

7. and 8. Rock Island Arsenal has no land disposal units on the installation. All waste stored in Building 242 is generated on RIA, and when shipped off-site, the required information is provided on the manifest and subsequent documents.

C. WASTE CHARACTERISTICS

C-1 Chemical and Physical Analyses: 703.183(b). 724.113(a)

Describe how each hazardous waste stream, to be stored in the unit, is generated. A laboratory waste analyses report detailing the chemical and physical analyses of representative samples of each waste stream must be provided.

The only exception to the need for laboratory reports is for off-spec material i.e. material that has not been used in any processes. Material Safety Data Sheets or other published information may be provided for each off-specification material, to be stored in the unit, in lieu of the laboratory reports.

Table 3-2, page C-13, should be referenced in this section.

Response:

The hazardous waste streams, as given above, are generated in the following manner:

- Metal Plating Waste (Solid and Liquid) - This waste stream is generated from the operation of a filter press that separates the precipitated metals from the electroplating rinse stream. The hazard characteristic* for this waste is F006, on the basis of toxicity of chromium metals present. The chemical and physical analysis for this waste is found in Rock Island Arsenal Waste Profile (RIAWP) Number 2924.

- Alkaline Derust Sludge (Solid) - This waste stream is generated from rust removal operations involving ferrous metal parts, components and assemblies, generally, in the metal finishing operations. The hazard characteristic* for this waste stream is D002, D007, ORM-E, on the basis of toxicity of chromium metals present and on the corrosivity of the waste. The chemical and physical properties of the waste are found in RIAWP Number 2004.

- Emission Control Dust from Weapons Testing and Steel Production (Solid) - These waste streams are result of ventilation systems baghouse collections at the respective locations; the weapons test range, building 25, and the steel foundry, building 212. The emission control dust from weapons testing has the hazard characteristic* of D008 due to the toxicity of lead. The chemical and physical properties are found in

RIAWP Number 2127. The hazard designation for the emission dust from the steel foundry is D006, D007, and D008 due to presence of cadmium, chromium, and lead. The chemical and physical properties of the waste are found in RIAWP Number 2126.

- Halogenated and Non-Halogenated Solvents with Degreaser Sludge (Liquid) - Halogenated solvents with degreaser sludge are generated at five degreaser machines located in buildings 208 (2 machines), 337 (1 machine), and 299 (2 machines). The hazard designation* for halogenated solvents with degreaser sludge is ORM-E, F001, D006, D007, and D008 due to the toxicity of metals. Non-halogenated solvents with degreaser sludge is designated as ORM-E and F001 due to the presence of 1,1,1-trichloroethane in the degreaser sludge.

- Hazardous Materials Not Saleable (in Original Container, May be Less Than 55 Gallons) - These hazardous materials may be generated anywhere in the Rock Island Arsenal manufacturing complex where processing changes result in excess or residual material. The hazard designation shall be determined by utilization of the Material Safety Data Sheets.

- Hazardous Materials Past Shelf Life (in Original Containers, May be Less than 55 Gallons) - These hazardous materials may be generated throughout the Rock Island Arsenal manufacturing complex where materials have been determined to be beyond the manufacturers recommended shelf life. The hazard designation shall be determined by utilization of the Material Safety Data Sheets.

- Painting Wastes - This waste may be generated in areas of the Rock Island Arsenal manufacturing complex where painting and subsequent equipment cleanup occurs, such as in buildings 208 and 299. The hazard designation for this waste stream is Waste Paint Related Material, Numbers D001, D001, F002, and F003. Painting sludge is ORM-E, D007.

- Cleaning Compounds - These wastes are generated in the in manufacturing processes requiring the use of cleaning compounds to remove soils resulting from machining such as in building 208. The hazard designation* is not required as no sludges or clean-out wastes have been generated due to the process having only recently been started up.

- Waste Flammables - These wastes are generated in sludges from cold cleaners using petroleum naphtha or from paint gun clean-out procedures located in building 208. Hazard designations, such as Combustible Liquid, D001, or ORM-E, D006, D007, and D008 for paint clean-out wastes.

- Waste Corrosives - These wastes may be generated in Paint related activities or in electroplating activities, in both applications, for the purpose of metal preparation. The hazard designations* for the electroplating process are Corrosive Material, D002, D006, D007, D005, due to corrosivity and to presence of toxic metals; and D008 and F005 due to the presence of chromium and lead.

- Quench Wastewaters and Sludge (Liquid) - These wastes may be generated in the Heat Treat area, building 222, due to the requirements of metallurgical processing. The hazard designation* is Poison B, F010 and/or F012, due to the presence of cyanide salts.

- Spent Heat Treat Cyanide Salts (Solid) (process discontinued) - this waste was generated in the Teat Treat area, building 222. However, the metallurgical requirement has been discontinued. The hazard designation* is Poison B, D003 and F010, due to the toxicity of cyanide.

- Wastewater Treatment Sludges from Electroplating and Painting Wastes (Solids and Liquids) - These wastes are generated from the wastewater treatment facilities (WWTF) located in building 212 and 208 for the electroplating and the paint facilities, respectively. The hazard designation* for the WWTF electroplating sludge is ORM-E, F006, and in the painting areas, the hazard designation* is Corrosive Material, D002, due to corrosivity.

  * See Table 3-2

The chemical and physical analysis of the representative wastes are found in Appendix A, (Rock Island Arsenal) Generator Waste Profile Sheets.

The use of the Generator's Waste Profile, or chemical analysis information, is not required for off-specification material as sufficient information is present on the Material Safety Data Sheet to identify all of the hazards associated with the waste.

C-1a Containerized Waste: 703.201(b)(1)

Section C-1a does not apply to this unit since all waste stored in the unit is provided with secondary containment.

Revise this section and place C-1a.1 Waste Management, C-1a.2 Waste Characterization, and C-1a.3 Waste Handling into the appropriate section of the application in accordance with the Agency's RCRA Part B Permit Application Decision Guide.

Response:

Section C-1a does not apply to the Rock Island Arsenal Part B application since all wastes intended for storage in Building 242 shall be provided with secondary containment. Delete Sections C-1a.1, C-1a.2, and C-1a.3.

C-2 Waste Analysis Plan: 7Ø3.183(c), 724.113(b) and (c)

C-2a Parameters and Rationale: 724.113(b)(1)

Each hazardous waste stream, including the listed hazardous waste, must be analyzed for all hazardous characteristics and constituents of all materials handled at the facility.

The TCLP test has replaced EP Toxicity in determining the characteristic of toxicity. TCLP should include all metals.

A waste may be characteristically hazardous due to corrosivity based on its pH and/or the rate at which it corrodes steel, see 35 Ill.Adm. Code Part 721.122. If any waste stream at the facility has this characteristic, the appropriate test method should be included.

A listed hazardous waste may also be characteristically hazardous, e.g. spent paint stripping solvents may also be hazardous due to metals, and if so, the waste should be identified as such.

Response:

All hazardous waste streams, including the listed hazardous wastes, shall be analyzed for all hazardous characteristics and constituents of all materials handled at the Rock Island Arsenal manufacturing complex. Table 3-2, Analytical Parameters Evaluated for all wastes stored at Building 242, page C-15, lists the analytical parameters for each waste. Effective 25 September 1990, all wastes shall be monitored utilizing the Toxicity Characteristic Leaching Procedure (TCLP) in accordance with 40 CFR 261.24 (55 FR 11862, 29 March 1990).

All wastes that are listed that may also be characteristically hazardous; e.g., spent paint stripping solvents that are also hazardous due to metals, shall be identified as both hazardous, listed and hazardous due to presence of metals.

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C-2c Sampling Methods: 724.113(b)(3), 40 CFR 261 - Appendix I

List sampling methods used to obtain a representative sample of each waste to be analyzed and document that the method is appropriate. Include a discussion of the following:

- The chain of custody procedures used
- Sample identification
- Preservation of the samples
- Sample containers

The first paragraph of Section C-2c, page C-6, states,

> "When necessary, two 1-quart samples of a hazardous waste stream are obtained in accordance with pp. 3.0 to 3.3-2 from "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods" (Environmental Protection Agency Office of Water and Waste Management, SW-846. . ."

Obtaining two 1-quart samples contradicts Table 3-6, page C-19. The reference to pp. 3.0 to 3.3-2 could not be located. Clarify the reference, include the volume, chapter, edition, etc. and resolve the above contradiction.

Response:

The sampling methods that shall be utilized to obtain a representative sample of each waste to be analyzed are given in Table 3-5, page C-18. All sampling methodology is referenced to 40 CFR 261 Appendix I.

Figure 2-22, "Chain of Custody Record," shall be utilized to document the origin of the waste to be analyzed. The sample shall be identified by utilization of the sample identification procedure currently used by the Materials Evaluation Branch, Rock Island Arsenal

The samples shall be preserved in accordance with procedures as given in Solid Waste Method, SE-846, USEPA. For example, samples to be analyzed for chromium metal shall be preserved by retention at 4°C. All other metals, except mercury, shall be preserved by acidification to <2pH. The TCLP sample, in accordance with SE-846, Method 1311, requires no preservation.

The sample containers required for obtaining the waste samples shall be selected in accordance with Solid Waste Method, SW-846, USEPA. For example, for pH testing, the sample container, in accordance with Solid Waste Method 9040, 9045, is clear glass for solid samples and high density polyethylene bottles for liquids. For chromium VI testing, for solid samples, clear glass

is specified (SW 7196) and for liquid samples, high density polyethylene bottles are specified. For the other metals, except mercury, SW 6010 specifies clear glass for solids or high density polyethylene for liquids. For chlorinated hydrocarbons, SW 8120 specifies clear glass for solid samples and amber glass for liquids. For non-halogenated volatile organic materials, SW 8015 or 8240 specify clear glass for solids and liquids.

The number of samples for analysis shall be selected from Table 3-6, "Number of Samples to be Collected as a Function of the Number of Items in the Shipment from the Satellite Accumulation Areas to Building 242."

The first paragraph, Section C-2c should be corrected to read:

> "When necessary 2, 1 quart samples of a hazardous waste stream are obtained in accordance with pages Three-1 to Three-5, para. 3.1 to 3.2, 3rd Ed., Vol. IA, SW-846.

C-2e Additional Requirements for Wastes Generated Off-Site: 724.113(c)

RIA may not accept hazardous waste from off-site sources, whether manifested or unmanifested. The procedures specified in 35 Ill. Adm. Code 724.176 (40 CFR 264.76), for receipt of unmanifested waste, do not apply to on-site storage facilities, see 35 ILL. Adm. Code 724.170.

Response:

The Rock Island Arsenal Building 242, Hazardous Waste Storage Facility, shall not receive hazardous wastes from off-site (installation) sources, whether manifested or unmanifested, or without an accompanying shipping paper as described in 35 Ill. Adm. Code 723.120 (e)(2) because the Part B Permit application pertains only to the utilization of Building 242 as a waste storage facility, not as a treatment or disposal facility.

C-2f Additional Requirements for Ignitable, Reactive or Incompatible Wastes: 724.113(b)(6), 724.117

Describe the methods used to meet additional waste analysis requirements necessary for treating, storing, or disposing ignitable, reactive or incompatible wastes. All wastes should be classified for compatibility pursuant to 40 CFR 264 Appendix V and pages B9A-9F of USEPA OSWER Doc. #9938.4.

Response:

The additional requirements for ignitable, reactive, or incompatible wastes shall be identified in 40 CFR 724.113(b)(6) and 724.117. The Rock Island Arsenal shall take precautions to prevent accidental ignition or reaction of ignitable or reactive wastes. This waste shall be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical or mechanical), spontaneous ignition (e.g. from heat producing chemical reactions) and radiant heat. While ignitable or reactive waste is being handled, specially designated locations to which smoking and open flames shall be confined. "No Smoking" signs shall be conspicuously placed wherever there is a hazard from ignitable or reactive wastes.

Additionally, where specifically required by the Part B, the Rock Island Arsenal, as owner of a storage facility that stores ignitable or reactive wastes or mixes incompatible waste and other materials, shall take precautions to prevent reactions which:

1. Generate extreme heat or pressure, fire or explosions, or violent reactions.

2. Produce uncontrolled toxic mists, fumes, dusts, or gases in sufficient quantities to threaten human health or the environment.

3. Produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions.

4. Damage the structural integrity of the device or facility.

5. Through other like means threaten human health or the environment.

The Rock Island Arsenal shall document the compliance with paragraphs (a) or (b), as necessary, based on references to published scientific or engineering literature, data from trial tests, waste analyses, or the results of the treatment of similar wastes by similar treatment processes or under similar operating conditions.

C-2g Waste Analysis Requirements for Land Disposal Ban

Describe the methods which will be utilized to comply with the land disposal restriction of 35 IAC 728.

Response:

Wastes shall be evaluated utilizing Section 728.150, Appendix A, "Toxicity Characteristic Leaching Procedure (TCLP)."

Rock Island Arsenal shall submit to the Agency a written certification that the requirements of Section 728.104 (a)(3) have been met and shall submit a copy of the waste analysis plan as required under Section 728.104(a)(2). Additionally, the following certification shall be submitted: "I certify under penalty of law that the requirements of 35 Ill. Adm. Code 728.104(a)(3) have been met for all surface impoundments being used to treat restricted wastes. I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

D. PROCESS INFORMATION

D-1 Containers

D-1a Containers with Free Liquids

D-1a(1) Description of Containers: 724.271, 724.272

Provide the following information about the containers used to store hazardous waste: approximate number of <u>each</u> type of container, construction materials, dimensions and usable volumes, DOT specifications or other manufacturer specifications, liner specifications (if applicable), container condition (new, used, reconditioned), and markings and labels. Note, this includes the original containers for the off-specification material.

Response:

Small containers are from a few ounces to about 15-20 gallons. The quantities of these small containers range from 1 to 150 containers with an average inventory of 50. In general the small quantities are in their original shipping containers which meet DoT specifications. However, the containers which do not meet DoT shipping requirements (49 CFR 173 and Appendix D) will be placed in 20 gallon polyethylene lab-pack (over pack) drums which meet Dot specifications. Note: The above information will be incorporated in D-1a(1)(a) through D-1a(1(g). The 20 gallon and 85 gallon polyethylene over pack drums are being purchased.

D-1a(2) Container Management Practices: 724.273

Describe the container management practices use for the off-spec material in original containers.

Response:

The small containers will be inspected prior to or upon receipt and the containers which do not meet DoT requirements will be placed in 20 gallon over pack drums and labeled according to contents. They will be stored with compatible substances or placed inside one of six steel containment storage cabinets. Large numbers of similar small containers may be palletized when necessary to reduce the potential for accidents when relocation is required.

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D-1a(3) Secondary Containment System Design and Operation: 703.201(a)(1), 724.275(a) and (d)

Figures 2-17 (page D-13) through 2-20 (page D-16) are not adequate. The scale of all of the drawings are not accurate and many of the details are unreadable. Provide design and profile drawings of the existing or planned container storage area(s), showing the secondary containment systems and the arrangement of containers. Indicate on the drawings the areas in which incompatible wastes will be stored. Wastes which are incompatible may not be stored within the same secondary containment system. Waste must also be prevented by use of barriers or other means from falling and/or spilling into adjacent containment systems where incompatible materials are stored.

Response:

The Rock Island Arsenal Engineering and Housing Directorate (EH) has been tasked to design a secondary containment system including storage arrangement, aisle layout, and spill barriers. Upon completion of the design, it will be presented as an amendment at a later date.

Figures 2-17 through 2-20 have been redrawn and consolidated. Incompatible wastes will be stored in one of the six steel storage cabinets or separated by as much space as possible until the redesign of secondary containment system has been completed. The redesign will also provide controls necessary to prevent cross contamination of incompatible materials.

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D-1a(3)(a) Requirement for the Base or Liner to Contain Liquids: 724.275(b)(1)

Demonstrate the capability of the base to contain liquids, including:

- A statement that the base is free of cracks or gaps;
- Demonstration of imperviousness of base to wastes and precipitation;
- Base design and materials of construction;
- An engineering evaluation of the base's structural integrity; and
- Discussion of compatibility of the base with wastes.
- Demonstrate that the epoxy coatings and joint sealing materials are compatible with the waste to be stored in the storage areas.

Response:

No cracks are present in the floors of Building 242 or gaps in the floor/curb concrete junction. Therefore, the base is free of cracks or gaps.

The present floor (base) is a 6-inch thick concrete slab with contraction joints sealed with a polyurethane base sealant impervious to water (precipitation) and contact with acids and alkalines. To date no materials that came into contact with the floor have compromised its integrity.

A secondary containment system is being designed to provide segregation of incompatible wastes. When the design is complete, this section will be amended.

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D-1a(3)(b) Containment System Drainage: 703.201(a)(2), 724.275(b)(2)

Describe the removal of spilled liquids from the 6 containment cabinets. Do the drums in the cabinets have to be removed to cleanup the spill?

This section states that the containers will be stored on wooded pallets. However, this conflicts with Section D-1a(2).5, page D-6, which indicates that drums may be stored on the floor of the drum storage area.

Response:

The grating (false floor) must be raised or removed to access secondary containment area. Therefore, the cabinets will normally be emptied when spill cleanup is required.

The secondary containment system is being redesigned. Containers may be stored on wooden pallets at the facility's convenience, but pallets will only be required when the drums are stacked.

Note: The wording conflict will be corrected.

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D-1a(3)(c) Containment System Capacity: 703.201(a)(3), 724.275(b)(3)

The demonstration of the containment capacity does not discuss the volume displaced by the containers and other structures including the storage cabinets in the containment system. This demonstration must be made for each containment area that holds incompatible waste, e.g. the cabinets for flammable waste.

Response:

Currently, the recessed storage area is 18 ft wide by 123 ft long with a 6-inch curb to contain the waste. The maximum containment capacity is 18 ft x 123 ft x .5 ft = 1,107 cubic ft x 7.48 gallons = 8,280 gallons per cubic ft.

The steel containment storage cabinets could hold 5, 55 gallon drums, a total of 275 gallons each. Each cabinet has a 100 gallon secondary containment area below the grating that would hold nearly 2 of the 5 drums or about 36 percent of maximum capacity, exceeding the 10 percent requirement for secondary containment.

The steel containment storage cabinets rest on the 6-inch curbs above the recessed storage area of the building and would not displace any volume in the recessed area.

Assuming the building was at maximum capacity of 540, 55 gallon drums, 30 drums would be in the six containment storage cabinets leaving 510, 55 gallon drums resting on the floor of the building. A total volume of 510 x 55 gallons = 28,050 gallons. Assuming 1/3 of the drums are stacked and a drum is 22 inches in diameter, the volume displaced by a drum to a 6-inch depth would be 1/4 pi $(22)^2$ x 6 = 2,280 cubic inches or 1.32 cubic ft or 9.8 gallons. The total volume displaced by 340 drums is 3,333 gallons.

Since the containment capacity is 8,280 gallons and the drums would displace 3,340 gallons, the containment capacity is 4,940 gallons. Ten percent of the maximum of the total volume stored is 2,805 gallons. Therefore, the secondary containment exceeds the minimum requirements. The above calculations assume the drums are compatible liquid waste and do not correct for the waste which would remain in the drums, approximately 9.5 gallons for each drum which leaked.

When the secondary containment system is redesigned, these calculations will be revised.

D-1a(3)(e) Removal of Liquids from Containment System: 703.201(a)(5), 724.275(b)(5)

References to other sections of the application must be specific. This section should specifically reference the section of the contingency which addresses the cleanup of spills, or the cleanup should be described in this section.

Response:

"Appendix I through M provide response procedures for oil, acid, caustic, flammable and combustible liquids, and pesticide spills." was added to the second paragraph.

D-1b Containers without Free Liquids

D-1b(1) Test for Free Liquids: 703.201(b)(1), 729.320

Submit the test results or other documentation or information to show that the wastes to be stored do not contain free liquids (e.g. EPA Method No. 9095). Visual inspection of the waste to determine if it contains free liquid is not adequate.

Response:

An analysis will be performed (Table 3-4, Page C-17) on solids and sludges to verify the requirements as a container without free liquids or the container will be handled as a container with free liquids.

D-1b(2) Description of Containers: 724.271, 724.272

See comment on Item D-1a(1).

Response:

Small containers are from a few ounces to about 15-20 gallons. The quantities of these small containers range from 1 to 150 containers with an average inventory of 50. In general the small quantities are in their original shipping containers which meet DoT specifications. However, the containers which do not meet DoT shipping requirements (49 CFR 173 and Appendix D) will be placed in 20 gallon polyethylene lab-pack (over pack) drums which meet Dot specifications.

D-1b(3) Container Management Practices: 724.273

See comments on Item D-1a(2).

Response:

The small containers will be inspected prior to or upon receipt and the containers which do not meet DoT requirements will be placed in 20 gallon over pack drums and labeled according to contents. They will be stored with compatible substances or placed inside one of six steel containment storage cabinets. Large numbers of similar small containers may be palletized when necessary to reduce the potential for accidents when relocation is required.

D-1b(4) Container Storage Area Drainage: 7Ø3.2Ø1(b)(2), 724.275(c)

See comments on Item D-1a(3).

Response:

Incompatible wastes will be stored in one of the six steel storage cabinets or separated by as much space as possible until the redesign of secondary containment system has been completed. The redesign will also provide controls necessary to prevent cross contamination of incompatible materials.

F PROCEDURES TO PREVENT HAZARDS

F-1 Security: 703.183(d), 724.114

F-1a Security Procedures and Equipment: 703.183(d), 724.114

Unless a waiver is granted, the facility must have either a 24-hour surveillance systems or a barrier and a means to control entry.

Response:

Arrangements will be made with the Rock Island Provost Marshal to establish 24-hour surveillance of Building 242 by the Rock Island Arsenal Police, reference 724.114(b)(1).

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F-1a(1) 24-hour Surveillance System: 7Ø3.183(d)

Random security patrols on a 24-hour basis does not satisfy the requirement for continuous monitoring of the storage area. If this requirement is not met, Sections F-1a(2) and F-1a(2)(b) must be satisfied.

Response:

In accordance with 724.114(b)(1), Building 242 will be monitored visually, on the hour, and a physical door lock check will be done every 8 hours by the Rock Island Arsenal security patrol on a 24-hour basis.

F-1a(2) Barrier and Means to Control Entry: 724.114(b)

F-1a(2)(a) Barrier: 724.114(b)(2)(A)

The fence and natural barrier does not surround the storage area. Since the security gates at the entrances to the facility are not manned 24-hours a day, persons could drive onto the facility and into the area of Building 242 (the storage area) unchecked unless stopped by the random patrols.

Response:

The Rock Island Arsenal police department will monitor building 242 hourly and check the door locks every eight hours, controlling entry into the active portion of the facility, and eliminating the need for a barrier (fence).

F-1a(3) Warning Signs: 724.114(c)

Describe the location(s) of the warning signs which read "Danger -- Unauthorized Personnel Keep Out."

Response:

The warning signs are placed on each of the four pedestrian doors as shown in Figure 2-6, page B-23.

F-2 Inspection Schedule: 703.183(a), 724.115

F-2a General Inspection Requirements: 703.183(e), 724.115(a) and (b), 724.133

Specify where the inspection schedule and the inspection log sheet will be kept.

Table 3-7 should be referenced in this section.

Response:

The inspection schedule and the inspection log sheet will be kept at the facility, in accordance with 724.115(b)(2).

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F-2a(1) Types of Problems: 724.115(b)(3)

The inspection log sheet (Figure 2-21, page F-11) must include all of the items specified in Tables 3-7 and 3-8.

Response:

Omit Table 3-7 and 3-8. Insert Table 3-7 directly behind Figure 2-21.

Column 1 - Items in Building 242 that must be inspected.
Column 2 - Conditions to inspect for each item checked.

Table 3-7 (Revised)

GENERAL INSPECTION SCHEDULE

1	2
ITEMS CHECKED	*DEFICIENCIES*
Utilities	
Water	On/Off/Frozen
Electricity	On/Off
Heat	On/Off
Temperature Control	Too Hot/Too Cold
Storage Conditions	
Building Exterior	Structural Damage
Drum Integrity	Cracks
Segregation of Wastes	Compatibility
Floor and Dike Integrity	Cracks
Aisle Spacing Inspectability	6 feet 3 inches
Security of Door Locks	Unlocked
Signs	In Place
Labeling	Proper HW Information
Spill Containment on Dock	None
Deterioration of Concrete	Cracks/Chips
Leak/Spills Detected	
Odors/Fumes Detected	
Height of Stacking (Max. 2 Drums)	
Overpacking of Drums	If Leaking
Waste Inventory	Date of Current Inventory in Use
Safety/Emergency Equipment	Min. Quantity
Steel Recovery Drums	8 Each
Absorbent-Spill X	30 Gallons
Absorbent Roll	1 Roll
Absorbent-Oil Dry	2 Bags
Fire Extinguishers	4 Each
Plastic Drums	2 Each
Brooms	2 Each
Shovels	2 Each
Eye Wash/Safety Shower	1 Each *
Emergency Clothing Suits	4 Each
Air Packs/Respirators	4 Each
Eye Shields/Goggles	4 Each
Telephones	3 Each 8

*Check to See if Operable

The schedule is checked every time the building is unlocked.

F-3b Aisle Space Requirement: 724.135

How much aisle spacing is there, between the pallets of waste, perpendicular to the 6 foot main aisle. A figure showing the arrangement of containers is needed, as required in Item D-1a(3)(a).

Response:

Sufficient aisle space will be maintained to allow the unobstructed movement of personnel between pallets of hazardous waste, reference Map J, revised, in accordance with 724.135.

F-4 Preventive Procedures, Structures and Equipment: 703.183(h)

F-4a Unloading Operations: 703.183(h)(1)

Describe the procedures used when placing the off-spec materials in their original containers into the storage area.

Response:

Off-spec material containers will be inspected prior to or upon receipt, and the containers which do not meet DoD requirements will be transferred to an appropriate container or placed in 20-gallon over pack drums and labeled according to contents. They will be stored with compatible substances or placed inside one of six steel storage cabinets. Large number of similar small containers may be palletized when necessary to reduce the potential for accidents when relocation is required.

F-4d Equipment and Power Failure: 703.183(h)(4)

Emergency lighting should be provided within the building. In the event of a power outage this would allow personnel to safely exit the area.

Response:

Emergency lighting shall be provided so as to mitigate the effects of equipment failure and power outages, in accordance with 703.183(h)(4).

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F-5 Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes

F-5a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste: 703.183(i), 724.117(a), 724.131

Page F-9 indicates that there are no open flames within the building. However, Section D-1a(1).3, page D-3. Indicates that gas heaters are used and typically these have open flames. Clarify this issue.

Specify the safety standards that the electrical equipment meets.

Response:

The Rock Island Arsenal will take precautions in Building 242 to prevent accidental ignition or reaction of ignitable or reactive waste. This waste must be separated and protected from sources of ignition or reaction including but not limited to: open flames, smoking, cutting and welding, hot surfaces, frictional heat, sparks (static, electrical, or mechanical), spontaneous ignition (e.g., from heat-producing chemical reactions), and radiant heat. While ignitable or reactive waste is being handled, smoking and open flame shall be confined to specially designated locations. "No Smoking" signs shall be conspicuously placed wherever there is a hazard from ignitable or reactive waste.

All electrical equipment shall meet the National Fire Prevention Association (NEPA) 70 and the National Electrical Code.

F-5d Management of Incompatible Wastes in Containers: 703.201(d), 724.277

Describe the procedures used to ensure that incompatible wastes, or incompatible wastes and materials are not placed in the same containers or in an unwashed container that previously held incompatible waste or material. If a storage container holds a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments, document that the wastes are separated from the other material or protected from them by means of a dike, berm, wall or other device. See item C-2f above for compatibility classifications.

Response:

Incompatible materials will be stored in one of six steel storage cabinets or separated by aisle space and/or spill barrier. The secondary containment design will provide provisions to prevent cross contamination of incompatible materials.

6. CONTINGENCY PLAN: 703.183(g), 724.137, 724.150 through 724.156, 724.152(b)

Table 1 of the Spill Prevention Control and Counter Measures Plan (Appendix H) does not include the materials stored in Building 242.

The Installation Spill Contingency Plan (ISCP) also in Appendix M, must note that Building 242 has a unique contingency plan and that spills should be handled as specified in this plan. A copy of Building 242's contingency plan must be incorporated into the ISCP.

Response:

The Spill Prevention Control and Countermeasures Plan (SPCCP) is in the process of being updated and the omission of Building 242 materials will be corrected.

The Installation Spill Contingency Plan (ISCP) will be amended to include the contingency plan for Building 242.

G-1 General Information

Provide the facility location and site plan.

Response:

Reference to Map A which shows the facility location and site plan will be included in this section.

G-3 Implementation: 724.151(b), 724.152(a), 724.156(d)

Describe how and when the contingency plan will be implemented. Page G-4 seems to indicate that the Emergency Coordinator may or may not implement the Contingency Plan depending on the event. If so describe the criteria used to determine when the contingency plan will be implemented.

Response:

The contingency plan shall be implemented if the Emergency Coordinator, the Rock Island Arsenal Installation Commander, has designated the Environmental Coordinator as the Emergency Coordinator, page G-2, determines that the facility has had a release, fire, or explosion which could threaten human health or the environment, outside the facility, the Emergency Coordinator shall report the findings as follows:

- If the assessment indicates that evacuation of local areas may be advisable, the Emergency Coordinator shall immediately notify appropriate local authorities. The Emergency Coordinator shall be available to help appropriate officials decide whether local areas should be evacuated.

- The Emergency Coordinator shall immediately notify either the government official designated as the on-scene coordinator for that geographical area, in the applicable regional contingency plan under 40 CFR Part 1510 or the National Response Center (using their 24-hour toll-free number 1-800-424-8802). The report must include:

  a. Name and telephone number of the reporter.
  b. Name and address of the facility.
  c. Time and type of incident (e.g. release, fire).
  d. Name and quantity of material(s) involved, to the extent known.
  e. The extent of the injuries, if any.
  f. The possible hazards to human health or the environment, outside the facility.

G-4 Emergency Response Procedures: 724.156

The contingency plan must include the necessary information and descriptions to satisfy the requirements of 35 IAC Part 724.156. The contingency plan must demonstrate that the following information was considered, at a minimum, in the development of the plan.

a. Type, amount, and variety of waste in the unit(s).

b. Location of waste.

c. Waste handling practices.

d. Possible hazards that may result from a release, fire, or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). This requires an estimation of the types and quantities of gases that may be generated.

e. The effects of weather conditions in the event of a release, fire, or explosion.

f. Identify the possible hazards to human health or the environment (on-site and off-site) that may result from a release, fire, or explosion.

g. Describe how the Emergency Coordinator (EC) will determine if a release, fire or explosion could threaten human health or the environment outside the facility. Identify the type of information and criteria the emergency coordinator would use in arriving at such a determination. In addition, estimate the time it would take to make such a determination and compare that to the time it would take material resulting from a release, fire or explosion to travel off-site.

h. How will the EC determine if evacuation of local areas may be advisable? As in g. above, identify the type of information and criteria the EC will use and make a time comparison of the time necessary to make such a determination to the time an off-site impact is estimated to occur.

i. Who will the EC notify if evacuation of the local areas is determined to be advisable?

An evaluation of this information may necessitate a change in the design or operation of the facility pursuant to 35 IAC 724.131.

Response:

When the Contingency Plan was developed, the following information was considered.

a. The type, amount, and variety of waste in the unit(s) - The current inventory and records to give information to assess the emergency.

b. The location of wastes - The current inventory identifies the location of each waste to assess the emergency.

c. The waste handling practices were evaluated to asses the types of situation where emergencies could occur.

d. Various worst-case scenarios were used to evaluate the possible hazards that may result from a release, fire, or explosion (e.g., the effects of any toxic, irritating or asphyxiating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). Typical estimates of types and quantities of gasses that may be generated were considered to determine methods of response.

e. The initial rally point was selected because of prevailing wind and weather conditions.

f. The EC will consider the quantity, type, and extent of materials involved in the incident, and the effect of weather conditions to determine the possible hazards to human health or the environment (on-site and off-site) that may result from a release, fire, or explosion.

g. The EC will evaluate the weather conditions and the extent of the release, fire, or explosion; the type and quantity of the materials involved; long with reference documents of possible reactions. Other sources of information, such as the disaster hotlines, may be utilized to determine the effects on human health and the environment outside the facility. Releases off the installation would apply to vapor clouds only because the fire department could dike the area to prevent off-site release of other than vapors. In the event of a fire or explosion, vapor release off-site could exceed evaluation time; therefore, the evacuation plan may be initiated prior to complete evaluation of the incident.

h. The EC will consider the quantity, type, and extent of materials involved in the incident. The effect of prevailing winds and weather conditions will be evaluated with regard to the release, fire, or explosion to evaluate the need for evacuation of local areas.

i. The EC will use the facility fire department and security departments which will proceed with evacuation procedures within Rock Island Arsenal. Telephone contact will alert the area local police and fire departments to proceed with aid in the evacuation of the facility and, if required, the surrounding communities.

G-4a Notification: 724.156(a)

Describe the methodology for immediate notification of facility personnel to the vicinity of the storage area and necessary state or local agencies.

Response:

Because of the size of the building, all personnel will be within shouting distance inside the building and all others will be notified by telephone or two-way radio.

G-4b Identification of Hazardous Materials: 724.156(b)

Describe procedures to identify the character, exact source, amount and area extent of any released material involved in the emergency.

Response:

Whenever there is a release, fire, or explosion, the Emergency Coordinator shall immediately identify the character, exact source, amount, and a real extent of any released materials. The Emergency Coordinator shall do this by observation or review of facility records or manifests, and if necessary, by chemical analysis.

G-4c Assessment: 724.156(c) and (d)

See item G-4 above. The assessment must consider both direct and indirect effects of the release, fire or explosion. The authorities to be notified should include the Illinois Environmental Protection Agency, Emergency Response Unit, the Illinois Emergency Services and Disaster Agency, the National Response Center, and those entities related to 35 IAC 724.153(b).

Response:

To access the hazard, the "direct and indirect effects of" the following will be considered and will be added on page G-6.

The Illinois Emergency Services and Disaster Agency and the Illinois Environmental Protection Agency Emergency Response Unit will be added to the list on page G-7.

G-4d Control Procedures: 724.152(a)

In the event of an emergency, specify the minimum safe distance of evacuation away from the building.

Demonstrate that the type of respiratory protection and protective garments to be used in the cleanup or spills is adequate for all types of waste stored in the unit. If the protective equipment is not compatible with all of the waste streams, describe how the correct equipment is chosen during an emergency.

Response:

"a minimum of 300 feet," will be added after evacuation on G-4d(1)(b), page G-8, and G-4d(4)(a), page G-11, will be added.

Organic vapor respirators are available in the building and escape devices are available for use in an emergency with any type materials or spill.

The fire department has short term disposable Class C Type I personal protective suits. These suits have labels which state the types of the materials compatible with the suit. The interagency agreement provides access to long-term protective clothing for any type of waste or spill.

G-4i Container Spills and Leakage: 724.152, 724.271

Specify procedures to be used when responding to container spills or leakage, including procedures and timing for expeditious removal of spilled waste and repair or replacement of the container(s). See Item G-4d above.

Response:

When a container spills or is found leaking, the procedures in G-4d(3) and G-4d(4) would apply depending on the size of the spill or leak. In general, after all the conditions of the plan are met, the spill or leak would be contained by diking pig "socks" or absorbants to limit the area of contamination. The leaking drum would be positioned to reduce leakage, stopped with a plug, and the drum and its remaining contents would be placed in an overpack drum. The absorbants would be placed in a drum and labeled as spill cleanup materials. The cause of the spill or leak would be evaluated to reduce similar incidents.

G-6 Coordination Agreement Requirements: 724.137, 724.152(c), 724.153(b)

Describe the emergency coordination agreements with local police and fire departments, hospitals, contractors, and state and local emergency response teams to familiarize them with the facility and actions needed in case of emergency. Document agreements and/or refusals to enter into a coordination agreement. Note that 35 IAC 724.153(b) requires that a copy of the contingency plan and all revisions must be sent to all local police and fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services.

Response:

The "mutual" agreements are on file at the RIA Fire Department. When the SPCCP and ISCP are updated, emergency coordination agreements will be obtained. Note: the separate ISCP for Building 242 will be included in the document.

G-7 Evacuation Plan: 724.152(f)

Map L could not be located in the application.

Response:

Map L was a foldout at the end of the G Section, page G-19. The information has been added to revised Map H with legends, as requested to meet requirements in Section B.

G-8 Required Reports: 724.156(l) and (j)

Describe the procedures which will be utilized to:

- Document in the operating record for the facility the time, date and details of any incident that requires implementation of the contingency plan.

- Notify the Agency's Division of Land Pollution Control (DLPC) Planning and Reporting Section and Field Operations Section and the Illinois ESDA that clean-up operations have been completed and that the emergency equipment has been cleaned and is fit for its intended use.

- Submit a report to the DLPC Planning and Reporting Section within 15 days after the incident has occurred which includes the following information:

  - Name, address and telephone number of the owner or operator;

  - Name, address and telephone number of the facility;

  - Date, time and type of incident (e.g., fire, explosion),

  - Name and quantity of material(s) involved;

  - The extent of injuries, if any;

  - An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

  - Estimated quantity and disposition of recovered material that resulted from the incident.

Response:

The time, date, and details of any incident that requires implementation of the contingency plan will be documented in the operating record of Building 242.

The Agency's Division of Land Pollution Control (DLPC) Planning and Reporting Section and Field Operations Section and the Illinois ESDA will be notified that clean-up operations have been completed and that the emergency equipment has been cleaned and is fit for its intended use.

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The following will be added to G-8(a):

Submit a report to the DLPC Planning and Reporting Section within 15 days after the incident has occurred which includes the following information:

1. Name, address and telephone number of the owner or operator;

2. Name, address and telephone number of the facility;

3. Date, time and type of incident (e.g., fire, explosion),

4. Name and quantity of material(s) involved;

5. The extent of injuries, if any;

6. An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

7. Estimated quantity and disposition of recovered material that resulted from the incident.

H. PERSONNEL TRAINING: 7Ø3.183(1), 724.116

H-1 Outline of the Training Program: 724.116(a)(1)

H-1a Job Title/Job Description: 724.116(d)(1) and (d)(2)

Identify all acronyms used in the application.

Describe the minimum qualifications for each job position.

Response:

Acronyms (unidentified) used in this application were:

AMCCOM, page H-3:	Army Munitions and Chemical Command
GS, page H-5:	General Schedule
DLA, page H-6:	Defense Logistics Agency
RTD, page H-6:	Reutilization, Transfer and Donation (to other federal agencies)
TDY, page H-6:	Temporary Duty
Dod, page H-7:	Department of Defense
DSN, page H-7:	National Stock Number
DRMO, page H-9:	Defense Reutilization and Marketing Office
DRMS, page H-9:	Defense Reutilization and Marketing Service
DRMR, page H-9:	Defense Reutilization and Marketing region
DoT, page H-1Ø:	Department Of Transportation
SPCC, page H-12:	Spill Prevention and Control and Countermeasures

The minimum qualifications for the job positions are:

Environmental Coordinator and/or Physical Scientist

Degree - Physical science, engineering, or mathematics that include 24 semester hours in physical science and/or related engineering science such as mechanics, dynamics, properties of materials, and electronics.

Combination of education and experience - course work equivalent to a major as shown above, which includes at least 24 semester hours in physical science and/or related engineering science such as mechanics, dynamics, properties of materials, and electronics, plus appropriate experience or additional education (Reference Office of Personnel Management Handbook X-118)

Custodial Foreman (Contracting Officer's Representative)

General experience - None
Specialized experience - 1 year

The experience will be directly related to the position and has equipped the individual with the particular knowledge, skills, and abilities to successfully perform the duties of the position. (Reference Office of Personnel Management Handbook X-118)

Chief, Defense Reutilization Marketing Office - Rock Island

General experience - None
Specialized experience - 1 year

The experience will be directly related to the position and has equipped the individual with the particular knowledge, skills, and abilities to successfully perform the duties of the position. (Reference Office of Personnel Management Handbook X-118)

Environmental Protection Specialist

Specialized experience - 1 year, experience which is in or directly related to the line of work or the position and which has equipped the person with the particular knowledge, skills, and abilities to successfully perform the duties of the position. The specialized experience must have been at least equivalent to the next lower grade level in the normal line of progression for the occupation in the organization.

Material Sorter and Classifier

General experience - 3 years. One year of which was at least equivalent to the next lower grade. Progressively responsible experience which equips the person with the particular knowledge, skills, and abilities to perform the duties of the position.

Specialized experience - None required.

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H-1b Training Content, Frequency and Techniques: 724.116(c) and (d)(3)

See page 1 of Appendix M, the EP Toxicity test for determining if a waste is characteristically hazardous has been replaced by the TCLP.

Appendix M must note that the reporting requirements for spills in the hazardous waste storage area are specified in the Contingency Plan for Building 242.

Response:

Appendix M has been revised to replace the EP Toxicity Test with the Toxicity Characteristic Leaching Procedure.

Appendix M has also been revised to note that the reporting requirements for spills in the hazardous waste storage area are specified in the contingency plan for Building 242.

H-1c *Training Director:* 724.116(a)(2)

Describe the minimum qualifications of the training director.

Response:

Training Director:

Degree - Physical science, engineering, or mathematics that includes 24 semester hours in physical science and/or related engineering science such as mechanics, dynamics, properties of materials, and electronics.

Combination of education and experience - Course work equivalent to a major as shown above which includes at least 24 semester hours in physical science and/or related engineering science such as mechanics, dynamics, properties of materials, and electronics, plus appropriate experience or additional education. (Reference Office of Personnel Management Handbook X118)

I. CLOSURE AND POST-CLOSURE REQUIREMENTS: 7Ø3.183(m), 724.21Ø through 724.22Ø

I-1 Closure Plans: 7Ø3.183(m), 724.212

I-1d(1) Closure of Containers: 724.278

The facility and equipment shall be decontaminated by steam cleaning and triple rinsing, wipe samples will not be required.

Soil samples shall be analyzed for all hazardous constituents of the waste that has been stored in the unit over its life.

Soil samples shall be obtained from beneath any cracks, joints or other defects that are found that would allow units to migrate to the soil.

Response: Replaces I-1d(1).1 and I-1d(1).2

Interior and exterior surfaces will be considered contaminated unless proven free of hazardous waste contamination.

For Building 242, all equipment which has come in contact with hazardous waste and/or hazardous materials will be decontaminated at closure, or shipped off-site to a permitted hazardous waste disposal site. The facility and equipment shall be decontaminated by steam cleaning and triple rinsing.

Soil samples shall be analyzed for all hazardous constituents of the waste that has been stored in the unit over its life. Soil samples shall be obtained from beneath any cracks, joints or other defects that are found that would allow units to migrate to the soil. The sampling methods and analysis will be in accordance with EPA Publication Number SW-846, "Test Methods for Evaluating Solid Waste, Physical Chemical Methods," as updated.

Contaminated soils will be disposed of in a properly permitted hazardous waste facility if any is determined to be present. All spent wash and rinse solutions generated as part of the cleanup operation will be collected and disposed of in a permitted disposed facility. Solid residues will be landfilled (if non-land ban items) in a properly permitted landfill.

For Building 242, the rinse water from any area found to be contaminated will be disposed of as a hazardous waste. Each area will be rinsed until a sample of the rinse water fails to meet any of the criteria set forth as previously described. Rinse water found to be noncontaminated will be discharged to the sanitary sewer system.

Any contaminated soil will be removed and shipped to a permitted hazardous waste facility. Soil will be removed down to background levels. Decontamination will be verified by additional soil testing.

J. OTHER FEDERAL LAWS: 703.183(t)

Demonstrate compliance with the requirements of applicable Federal laws such as the Clean Air Act, Clean Water Act, the Wild and Scenic Rivers Act, National Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Management Act, and Fish and Wildlife Coordination Act. Provide all relevant documentation.

Response:

Compliance shall be demonstrated with the requirements of applicable Federal laws such as the Clean Air Act, Clean Water Act, the Wild and Scenic Rivers Act, the National Historic Preservation Act of 1966, the Endangered species Act, the Coastal Zone Management Act, and Fish and Wildlife Coordination Act.

Letters requesting review and compliance concurrence (encl) of the Rock Island Arsenal's Part B Permit application have been sent to all of the above listed Federal offices. Compliance concurrence with the Coastal Zone Act was deemed not applicable as the Rock Island Arsenal resides on an island in the Mississippi River, and is not adjacent to any coastline in the United States.

Mr. Alan Hutchings
National Park Service
Division of Planning and Environmental Quality
1709 Jackson Street
Omaha, Nebraska 68012

Applicable Act: Wild and Scenic Rivers Act

Mr. Richard Nelson
Fish and Wildlife Service
1830 2nd Avenue
Rock Island, Illinois 61201

Applicable Act: Endangered Species Act and Fish and Wildlife Act

Commander
Rock Island Arsenal
ATTN: SMCRI-EHP (Mr. Bobby Roberts)
Rock Island, Illinois 61299-5000

Applicable Act: National Historic Preservation Act

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Response March 15, 1991

USEPA Region V
Compliance Unit (CAA)
230 South Dearborn Street
Chicago, Illinois 60604

Applicable Act: Clean Air Act

USEPA Region V
Compliance Unit (CWA)
230 South Dearborn Street
Chicago, Illinois 60604

Applicable Act: Clean Water Act

Rock Island Arsenal
1618130001 -- Rock Island County
IL5210021833
B-122
January 16, 1991
Response March 15, 1991

Dear_____ :

On November 8, 1988, the Rock Island Arsenal (RIA), Rock Island, Illinois, submitted a Resource Conservation and Recovery Act (RCRA) Part B Permit application to permit the operation of a Hazardous Waste Management Storage Facility, for storage of liquid and solid hazardous wastes, to the Illinois Environmental Protection Agency (IEPA.

In its review of this Part B Permit application, the IEPA requires that the RIA provide documentation demonstrating compliance with other federal laws; e.g., Clean Air Act, Clean Water Act, the Wild and Scenic Rivers Act, the National Historic Preservation Act of 1966, the Endangered species Act, the Coastal Zone Management Act, and the Fish and Wildlife Coordination Act.

Accordingly, in order to comply with IEPA requirements, it is requested that your office review the enclosed permit application with regard to compliance with the _____ Act. A written response regarding this permit application's compliance is appreciated.

Please direct any questions concerning this permit application to Dr. William Shore, Rock Island Arsenal Environmental Coordinator, (309) 782-7855/7926, address as follows: Commander, Rock Island Arsenal, ATTN: SMCRI-SEM (Dr. William Shore), Rock Island, Illinois 61299-5000.

Sincerely,

Achiel M. Dupont, Jr.
Director, Science and
Engineering Directorate

Enclosure

K. PART B CERTIFICATION; 703.182

K-1 Facility Certification: 703.182, 702.126

The certification letter must contain the wording required to 35 Ill. Adm. Code 702.126(d).

Response:

The certification letter shall read:

> "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Signed

Richard W. Bregard

Colonel, U.S. Army, Commanding
Rock Island Arsenal

Owner/Operator
Bldg. 242 Date

Rock Island Arsenal
1618130001 -- Rock Island County
IL5210021833
B-122
January 16, 1991
Response March 15, 1991

K-2 Engineering Certification: 703.182, Illinois Professional Engineering Act

Technical data, such as design drawings, specifications and engineering studies, must be certified (sealed) by a Professional Engineer who is licensed to practice in the State of Illinois in accordance with Ill. Rev. Stat., par. 5101, Sec. 1 and par. 5119, Sec. 13.1.

The engineering certification must specifically list by date, revision number, etc. all documents which are being certified or each document must be sealed by the engineer.

Response:

Technical data, such as design drawings, specifications, and engineering studies, shall be certified (sealed) by a Professional Engineer who is licensed to practice in the State of Illinois in accordance with Ill. Rev. Stat., par. 5101, sec. 1 and par. 5119, sec. 13.1. The engineering certification shall specifically list by date, revision number, etc., all documents being certified, or each document shall be sealed by the engineer.

L. CONTINUING RELEASES AT PERMITTED FACILITIES [3004(U)]

Provided a list of all solid waste management units (SWMU) at the facility and the information required in Item L-1 through L-2a. References to other parts of the application must be specific. Referencing Appendix L for the information required below is not acceptable. If information from Appendix L of the application will be used to meet the requirements below, the information must be specifically referenced (i.e. by page number at a minimum) for each SWMU and requirement.

Response:

See Table 3-9 for a list of Solid Waste Management Units (SWMU).

Rock Island Arsenal
1618130001 -- Rock Island County
IL5210021833
B-122
January 16, 1991
Response March 15, 1991

L-1. Solid Waste Management Units

Identify each solid waste management unit at the facility. A solid waste management unit includes any unit which is not a "regulated unit" and may include any of the following:

- Landfill
- Surface impoundment
- Waste pile
- Land treatment unit
- Injection well
- Incinerator
- Tank (including wastewater treatment units, elementary neutralization units, and tanks used in reuse/recovery operations)
- Container
- Storage area, transfer station or waste recycling operation

Response: Please see Table 3-9.

L-1a Characterize the Solid Waste Management Unit

For each solid waste management unit, submit the following information:

- Type of each unit
- Location of each existing or closed unit on the topographic map. [See comment B-2.]
- Engineering drawings for each unit, if available
- General dimensions of each unit
- Dates when the unit was in operation
- Description of the materials or wastes placed to each unit
- Quantity or volume of waste, if known

Response: Please see Table 3-9.

L-2 Releases

Provide all information available on whether or not any releases have occurred from any of the solid waste management units at the facility. Reasonable efforts to identify releases must be made, even if releases have not been verified. (A release may include: spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment. It does not include releases otherwise permitted or authorized under law or discharges into the injection zone of a UIC permitted class I injection well.)

Response:

A review of environmental records reveals a RIA chemical spill record beginning July 1979 to the present as to releases at the Rock Island Arsenal. The spill records will be made part of this report in Section L-2a.

L-2a Characterize Releases

Information on releases must include the following types of available information concerning prior or current releases:

- Date of the release
- Type of waste or constituent released
- Quantity or volume released
- Nature of the release
  - -- Spill
  - -- Overflow
  - -- Ruptured pipe or tank
  - -- Other
- Groundwater monitoring and other analytical data available to describe nature and extent of release. If other than groundwater monitoring data, please describe.
- Physical evidence of distressed vegetation or soil contamination
- Historical evidence of releases such as tanker truck accidents
- Any state, local or federal enforcement actions which may address releases
- Any public citizen complaints about the facility which could indicate a release
- Any information showing the migration of the release.

Response:

- Groundwater monitoring was initiated at all state enforcement actions.
- There is no existing evidence of vegetation or soil contamination at this time.
- To the best of the Environmental Coordinator's knowledge there has been no tanker truck accidents at Rock Island Arsenal.

- Enforcement actions are included on Table 3-1Ø with incident or LUST reference number.

- To the Environmental Coordinator's knowledge there has been no environmental complaints made from the Public.

- There is no indication or information showing migration. All spills were properly contained and cleaned up.

Table 3-1Ø tabulates the following release information:

DATE: Date of the release.
BLDG: Location of the release
QUANTITY OR VOLUME: Amount or volume of the release.
TYPE OF WASTE: General description of material involved in the release.
NATURE OF RELEASE: General description of release incident.

TABLE 3-10 (CONTINUED)

RIA CHEMICAL SPILL RECORDS

DATE	BLDG	QUANTITY OR VOLUME	TYPE OF WASTE OR CONSTITUENT RELEASED	NATURE OF THE RELEASE INCIDENT NUMBER, IF KNOWN
05-23-85	210 North	5 gal	PCB Oil	Old Transformer Leaking on Removal
07-16-85	64	200 lbs	TCEA(WWTF)	Unknown
04-11-86	218	< 2 gal	Petro NAPHTHA	Clean-up oil Residue
04-24-86	230	< 30 gal	TCEA	Malfunction of Drain Valve on Degreaser Still
09-10-86	242	Unknown	50% Sulfuric Acid	55 gal Drum and 85 gal Drum Overpack had corroded
09-23-86	250	10 gal	Cutting Oil from Metal Chips	Drained from Chip Dump Tub
09-24-86	350	20 gal	Cutting Oil from Metal Chips	Chip Gondola Cracked
03-11-87	222	20 gal	Trimsol Coolant	Filling Hose Dislodged
04-29-87	40	1 gal	Hydraulic Fluid	Valve Failure
04-30-87	108	residual	Ammonia Gas	Valve Failure 'empty' Tank
05-12-87	168	* gal	Broadleaf Weed Killer Diluted for Application	Mishandling (Not Considered a Spill)
* 5 gal cleanup mat'l				
07-13-87	RR (Dav Bridge)	25 gal	Petroleum Product	Unknown Vehicle
07-15-87	106	< 1 gal	Dielectric Oil	Mishandling (Not Considered a Spill)
08-19-87	208	3 gal	Lubricating Oil	Overfilling
10-09-87	25	175 gal	Hydraulic Fluid	Hose Aging
10-14-87	60	3-5 gal	Hydraulic Fluid	Piston Seal Failure
01-21-88	230	10 gal	1,1,1 Trichloroethane	Barrel Knocked Over

TABLE 3-10 (CONTINUED)

RIA CHEMICAL SPILL RECORDS

DATE	BLDG	QUANTITY OR VOLUME	TYPE OF WASTE OR CONSTITUENT RELEASED	NATURE OF THE RELEASE INCIDENT NUMBER, IF KNOWN
01-26-88	222	< 1 gal	Sulfuric Acid Laden Material	Leaking Drum
02-01-88	212	500 gal	Chrome	Water Hose Left Running and Tank Overfilled
02-03-88	65	50 gal	Unfiltered Waste-water Treatment Sludge(< 1lb flowed into Street	Line Failure
03-30-88	390	5-10 gal	85%-90% Acetic Acid 10%-15% 1-Phenyl-3-Pyrazalidone	Overflow
06-20-88	Forge Shop	200 gal	Oil	Faulty Piping
06-21-88	216	Unknown	Dichlorethane Trichlorethane Toluene, Naphthalene	Tank and Line Failure IEPA LPC 161813001
DATE	BLDG	QUANTITY OR VOLUME	TYPE OF WASTE OR CONSTITUENT RELEASED	NATURE OF THE RELEASE INCIDENT NUMBER, IF KNOWN
06-25-88	222	1600 gal	Quench Oil	Overflow Due to Parts Falling into Tank
07-18-88	110	25 gal	Hydraulic Fluid	Broken Seal
09-19-88	299	< 1 gal	Technical Grade Nitric Acid	Leaky Drum
10-01-88	Moline Bridge	Unknown	Motor Oil	Damaged Vehicle Oil Pan
10-21-88	350	800-900 gal	Glycol	Pipe Nipple Failure
03-14-89	Boat Dock	10-15 gal	Paint	Unknown

TABLE 3-10 (CONTINUED)

RIA CHEMICAL SPILL RECORDS

DATE	BLDG	QUANTITY OR VOLUME	TYPE OF WASTE OR CONSTITUENT RELEASED	NATURE OF THE RELEASE INCIDENT NUMBER, IF KNOWN
03-22-89	299	5 gal	Pesticide 2,4-D	Pierced Container
04-13-89	212W	25 gal	Petrol. Naphtha	Leaking Spigot
06-20-89	299	950 lbs	Pyro-Chem Dry Chemical Fire Extinguisher Powder	Value Malfunction
10-04-89	Plating Shop Roof	500 gal	Biocide (approx 300 ppm)	Operator Error
10-26-89	22	Unknown	Gasoline	LUST Incident 891462
10-27-89	220	50 gal	Hydraulic Fluid	Ruptured Line
11-14-89	222	Unknown	Quench Oil	Ruptured Lines Incident 903187
01-02-90	220	Unknown	Hydraulic Fluid	Hose Failure or Cut
03-21-90	11	Unknown	Fuel Oil	Ruptured Line Incident 900741
04-10-90	229	2 gal	Sulfuric Acid	Genie Boom Accidentally Ran into Fork Truck
04-10-90	22	3-4 gal	Kerosene	Overfilling 275 gal Kerosene Storage Tank
04-27-90	239	25 gal	Diesel Fuel	Procedural Practice/ Housekeeping Incident 901146
09-21-90	133	Unknown	Diesel Fuel	Pipenipple Failure Incident 902682
12-07-90	244	25 gal	Diesel Fuel	Housekeeping Procedures Incident 903187

TABLE 3-2

ANALYTICAL PARAMETERS FOR ALL
WASTES STORED AT BUILDING 242

Hazardous Waste	Parameter
1. Alkaline Derust Sludge	pH (metals and volatiles)
2. Sludge, Plating Wastewater Treatment	pH (metals and volatiles)
3. Wastewater Treatment Sludge, Painting	pH, TCLP (metals and volatiles)
4. Electrolytic Recovery from Spent Hypo Solution	TCLP (metals and volatiles)
5. Chromium Plating Sludge	pH, TCLP (metals and volatiles)
6. Phosphate Sludge	TCLP (metals and volatiles)
7. Iron Citrate Derust	pH, TCLP (metals and volatiles)
8. Oakite Deoxidizer	pH, TCLP (metals and volatiles)
9. Oakite Sludge	pH, TCLP (metals and volatiles)
10. Lithium Batteries	None
11. Waste Stop-Off Wax From Plating	TCLP (metals and volatiles)
12. Degreaser Still Sludge, Distillation Residue	Listed Waste, TCLP (metals and volatiles)
13. Spent Non-Halogenated Solvents, Paint Thinner	Flash Point, TCLP (metals and volatiles)
14. Spent Non-Halogenated Solvents Paint Stripping	Flash Point, Listed Waste, TCLP (metals and volatiles)
15. Blankrola	Flash Point, TCLP (metals and volatiles)
16. Waste Oil, Contaminated	Flash Point, TCLP (metals and volatiles)

TABLE 3-2 (CONTINUED)

ANALYTICAL PARAMETERS FOR ALL
WASTES STORED AT BUILDING 242

Hazardous Waste	Parameter
17. Petroleum Naphtha, Used	Flash Point, TCLP (metals and volatiles)
18. Paint Sludge with Isocyanates	Flash Point, TCLP (metals and volatiles)
19. Carc Paint with Solvents Waste Paint	Flash Point, TCLP (metals and volatiles)
20. Waste Paint	Flash Point, TCLP (metals and volatiles)
21. Quench Bath Sludge from Oil Baths, Forge Shop	Chloride, Cyanide, and Metals Contamination, TCLP (metals and volatiles)
22. Quenchant Wastewater, Heat Treat	Cyanide, TCLP (metals and volatiles)
23. Waste Cyanide Mixture	Cyanide, TCLP (metals and volatiles)
24. Cyanide Salts	Cyanide, TCLP (metals and volatiles)
25. Emission Control Dust, Steel Production (not primary)	TCLP (metals and volatiles)
26. Emission Control Dust, Weapons Test Range	TCLP (metals and volatiles)

Figure 2-22

CHAIN OF CUSTODY RECORD

Rock Island Arsenal
Rock Island, IL 61299-5000
(ATTN: Environmental Coordinator, (309) 782-7855)

Bldg:
Location:

Sample Type:

Grab or Composite
Number of Containers:

Analysis Required:

Collected By:
Date:
Time:

Relinquished By:	Received By:	Date	Time
Relinquished By:	Received By:	Date	Time
Relinquished By:	Received By:	Date	Time

Dispatched By: Date: Time: Received for Contract Laboratory By: Date: Time:

Method of Shipment:

Appendix A

WASTE ANALYSIS PROFILE SUMMARY

The following is a description of the columns referenced in the waste analysis.

Column 1 - The profile number referring to the waste analysis number on file in the Environmental office.

Column 2 - Name of waste.

Column 3 - Location of the waste generated, if known.

Column 4 - Physical state of waste.

Column 5 - pH of waste.

Column 6 - Density of waste, if known.

Column 7 - Odor of waste.

Column 8 - DoT shipping name of waste.

Column 9 - DoT hazard class.

Column 10 - DoT/international identification number.

Column 11 - USEPA hazard code.

Column 12 - USEPA hazard waste type number.

Column 13 - personal protection code.

FIGURE 2-11
STORED RECORD - OPERATING LOG

1	2	3		4	5	6	7	8	9	10
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]

[illegible] [illegible] PAGE 2

1	2	3		4	5	6	7	8	9	10
		GENERATOR DATA						STORAGE		
DRUM NO.	EPA ID NO. / [illegible]	[illegible] / NAME	BLDG. NO. / PHONE	DESCRIPTION OF CONTENTS / TYPE OF OPERATION	PHY. FORM / EPA CODE	EPA HAZ. WASTE NUMBER	WT/VOL : SYMBOL / DENSITY / VALUE : SYMBOL	DATE / LOCATION	DISPOSAL MANIFEST NUMBER	SHIPPED DATE
[illegible]	[illegible]			PLATING WASTE WATER	SLUDGE	F006	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			PHOSPHATE SLUDGE FILTER CAKE- [illegible]	SLUDGE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	2120 [illegible]	[illegible]	SOLID	F006	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	2120 [illegible]	[illegible]	SOLID	F006	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	2120 [illegible]	[illegible]	SOLID	F006	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	2120 [illegible]	[illegible]	SOLID	F006	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	PLATING WASTE SLUDGE / WASTE TREATMENT PLANT	SOLID	F006	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			SOLID [illegible] chloride	SOLID	NONE	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	FURNACE DUST	SOLID	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	FURNACE DUST	SOLID	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	FURNACE EMISSION DUST / [illegible]	SOLID	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	FURNACE EMISSION DUST / [illegible]	SOLID	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			FURNACE EMISSION DUST	SOLID	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	FURNACE DUST	SOLID	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	FURNACE EMISSION DUST / [illegible]	SOLID	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			FURNACE DUST	SOLID	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			FURNACE DUST	SOLID	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]			FURNACE EMISSION DUST	SOLID	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

RUN DATE: [illegible] SHIPPED RECORDS PAGE 13

FIGURE 2-12

SHIPPED RECORD - OPERATING LOG

Figure 2-23

HAZARDOUS WASTE STORAGE FACILITY - BUILDING 242

(RETAIN IN FILE FOR THREE CALENDAR YEARS)

INSPECTION RECORD

DATE:	TIME:	INSPECTOR:	ORGANIZATION:
3-7-91	1105	Merlin Arensdorff	SMCRI-CR

[redacted] CHECKED	DEFICIENCIES: (Specify any or state "OK" if none)	REMARKS: (Date and nature of corrective action taken)
UTILITIES		
WATER	OK	
ELECTRICITY	OK	
HEAT	OK	
TEMPERATURE CONTROL	OK	
STORAGE CONDITIONS		
BUILDING EXTERIOR	OK	
DRUM INTEGRITY	OK	
SEGREGATION OF WASTES	OK	
FLOOR AND DIKE INTEGRITY	OK	
AISLE SPACING (INSPECTABILITY)	OK	
SECURITY OF DOORS/LOCKS	OK	
SIGNS (Warning, "NO SMOKING", Exit, PCB)	OK	
LABELING	OK	
SPILL CONTAINMENT ON DOCK	None	
DETERIORATION OF CONCRETE	None	
LEAK/SPILLS DETECTED OR OBSERVED	yes 3-7-91	Overpacked
ODORS/FUMES DETECTED OR OBSERVED	None	
HEIGHT OF STACKING (MAX. 2 DRUMS)	2 High	
OVER PACKING OF DRUMS	5	
WASTE INVENTORY	Jan 25-91	

SAFETY/EMERGENCY EQUIPMENT	MIN QTY		
STEEL RECOVERY DRUMS	8 ea	OK	
ABSORBENT - SPILL X	30 gal	OK	
ABSORBENT ROLL	1 roll	OK	
ABSORBENT - OIL DRY	2 bags	OK	
FIRE EXTINGUISHERS	4 ea	OK	
PLASTIC DRUMS	2 ea	OK	
BROOMS	2 ea	OK	
SHOVELS	2 ea	OK	
EYE [redacted]SH/SAFETY SHOWER	1 ea	OK	
EM[redacted]CY CLOTHING SUITS	4 ea	OK	
AIR PACKS/RESPIRATORS	4 ea	OK	
EYE SHIELDS/GOGGLES	4 ea	OK	
TELEPHONES	3 ea	OK	
OTHER (SPECIFY OR STATE "NONE")			

SMCRI FORM 846, 1 FEB 88

TABLE 3-10

RIA CHEMICAL SPILL RECORDS

DATE	BLDG	QUANTITY OR VOLUME	TYPE OF WASTE OR CONSTITUENT RELEASED	NATURE OF THE RELEASE INCIDENT NUMBER, IF KNOWN
07-13-79	155	15 gal	#2 Fuel Oil	Spilled while filling UST
08-09-79	106 Sewer	15 gal	Waste Hydraulic Fluid	Improper Dump of Liquid
08-14-79	DRMO Salvage Yard	100-150 gal	#12 Transformer Oil	Accidental Bumping Off of Value
11-15-79	201	5 gal	Diesel Fuel	Contractor Workman Error
02-04-80	299	5 gal	Cu Pure Makeup Conc.	Accidental Punctured Container
07-24-81	106	5-6 gal	PCB Oil	Ruptured Capacitor
02-24-83	220	100 gal	Waste Oil	Fill Gauge Broken on Tank
05-27-83	220 Oil Tank	40 gal	Recycle Used Oil	Improper Overfilling of Tank
09-12-83	120	20 gal	98% Sulfuric Acid	Forklift Penetrated Plastic Carboys
03-06-84	250	< 1 qt	PCB Oil	Ruptured capacitor
03-26-84	106 Court	Unknown (Minor)	Hydraulic Fluid	Empty Drum Bung misorientation
07-10-84	102 Outside	100 gm	PCB Oil	Two Capacitors Fell From Truck
12-18-84	202 South	1300 gal	Non-hazardous Coolant	Unknown
01-30-85	341	12 gal	PCB Oil	Transformer Leak
01-31-85	DRMO-RI Scrap Yard	10 gal	PCB Oil	PCB & Water Drum Leak
03-01-85	222	2.2 gal	PCB Oil	Ice Froze Capacitor Coil
03-19-85	54	5 gal	Petroleum Oil	Sump Pump Failure

TABLE 3-9

SOLID WASTE MANAGEMENT UNIT	TYPE	MAP	ENGINEERING DRAWINGS	GEN DIMENSIONS	DATES OF OPERATION	DESCRIPTION	QU
SATELLITE/ACCUMULATION AREAS AND 242 STORAGE AREA	TRANSFER STATION	P	not available	average-8ftX8ft	1984-present	hazardous waste from shops	
DRMO SALVAGE YARD (PCB SPILLS)	STORAGE AREA	Q	not available	8 acres	1951-present	scrap metal,empty drums	
BUILDING 133 MAINTANENCE(RINSE OF PESTICIDES)	STORAGE AREA	Q	not available	1,277 square feet	1940-present	pesticides storage & filling	
BUILDING 64 AND 65	TRANSFER STATION	Q	not available	48,479 square feet	1957-1988	plating shop, wastewater trmt	10
BUILDING 175,OLD STORAGE AREA(DEMOLISHED)XYZ	STORAGE AREA	Q	not available	10,000 square feet	demolished in 1982	waste cyanide storage	
BUILDING 251, SPENT BATTERY ACID	TRANSFER STATION	Q	not available	8,459 square feet	not used since 1988	spent battery acid	
BUILDING 58, WASTE SOLUTIONS FROM PHOSPHATING	TRANSFER STATION	Q	not available	16,249 square feet	not used since 1980	phosphating	
INDUSTRIAL FILL AREAS,BY BUILDING 207	LANDFILL	Q	not available	20 acres	1960-1970	construction debris	
LANDFILL AROUND #299	LANDFILL	Q	not available	10 acres	1920-1965	oils,plating solutions	
UNDERGROUND WASTE TANKS IN BUILDING 220	TANK	R	not available	(4) 15,000 gals	removed in 1988	quench oils,cutting fluid	
BUILDING 159, WASTE OIL FROM MOTORPOOL	TRANSFER STATION	Q	not available	<1000 gals.	current	waste oil,metals,solvent	
BUILDING 254, HOLDING TANK	TRANSFER STATION, TANK	R	not available	10,000gals	not used since 1977	buried bomb casing	
BOMB CASINGS BY TEST TRACK	NOT APPLICABLE	Q	not available	100 square feet	1950s	wood & combustible items burned	
PARALLEL TO SYLVAN SLOUGH, BURNING GROUND	LANDFILL,LAND TREATMENT UNIT	Q	not available	1/4 acre	not used since 1980	burn pits for shells	
BUILDING 154,DEMOLITION & BURN PIT FOR SHELLS	LAND TREATMENT UNIT	Q	not available	1 acre	1870-1880	construction debris,scrap metal	
OLD QUARRY, BY TEST TRACK	LANDFILL	Q	not available	1.5 acres	1962-present	pesticides,herbicides	
PESTICIDES IN BUILDING 139	STORAGE AREA	Q	not available	862 square feet	1940-present	fire training site	
XYZ AREA, OLD STORAGE AREA EAST OF 299	STORAGE AREA	Q	not available	17 acres	demolished in 1981	unknown	
AIR POLLUTION EQUIPMENT	TRANSFER STATION	I	not available	19 permits	currently	foundry,range emission dust	
STORM WATER DISCHARGE	NOT APPLICABLE	Q	not available	not applicable	1990	milky one time release	
BUILDING 204, INDUSTRIAL & SANITARY SEWER	NOT APPLICABLE	C	not available	1,554 square feet	currently	sanitary sewer system	

APPENDIX A

1	2	3	4	5	6	7	
PROFILE	NAME OF WASTE	PROCESS GENERATING	CC	PHYSICAL STATE	pH	DENSITY	ODOR	CHI
0005	CYANIDE SALT MIXTURE	HEAT TREAT		SOLID	6-8	1.2-1.4G/CC	STRONG	WA
0501	LITHIUM BATTERIES(LISO2)	ELECTRONIC EQUIPMENT		SEMI-SOLID				LI
1304	BLK OXIDE SALTS/INSULATION	PLATING SHOP	7910	SOLID	14	2.14G/CC	NONE	WA
1304	CATALYST(TOLUENE SULFONIC)	FOUNDRY	8000	SOLID			STRONG	TO
1304	FE CITRATE DERUST W/OIL&TCEA	PREPAINT		LIQUID	3-5	10	NONE	WA
1304	FLUOBORIC ACID-UNUSED	PLATING	7910	LIQUID	<2	1.4G/CC	MILD	WA
1304	HYDROCHLORIC ACID-SPENT	PLATING	7910	LIQUID	<1	11.5LB/GAL	MILD	WA
1304	HYDROFLUORIC ACID-UNUSED	PLATING	7910	LIQUID	<2	1.2G/CC	MILD	HY
1304	OAKITE BLACKGUARD	PLATING	7910	LIQUID	<1	1.2G/CC	MILD	WA
1304	OAKITE CHROMICOAT L-25	PLATING	7910	LIQUID	<2	1.6G/CC	NONE	WA
1304	OAKITE DEOXIDIZER	PLATING/WELD	7910	LIQUID	<2	8.5	MILD	WA
1304	OAKITE SLUDGE	PLATING/WELD	7910	SEMI-SOLID	2	8.9	NONE	WA
1304	PHOSPHATE SLUDGE-PLATING	PLATING SHOP	7910	SEMI-SOLID	2-3	11	STRONG	WA
1304	RODINE 50	PLATING	7910	LIQUID	<2	1.05G/CC	MILD	WA
1655	ENSTRIP NP-2-UNUSED	PLATING	7910	LIQUID	12	1G/CC	STRONG	WA
1655	OAKITE 90-UNUSED	PLATING	7910	SOLID	13.2	1.3G/CC	MILD	WA
1655	OAKITE LRS	PLATING	7910	LIQUID	13	1.3G/CC	MILD	WA
1655	OAKITE STRIPPER A-1-UNUSED	PLATING	7910	SOLID	11.5	8.4LBS/GAL	MILD	WA
1659	OAKITE 100-UNUSED	PLATING	7910	SOLID	13.4	1.2G/CC	NONE	WA
2004	ALKALINE DERUST SLUDGE	SMCRI-AO		SEMI-SOLID	11-12	8LBS/YD3	MILD	WA
2004	LEAD FLUOBORATE	PLATING	7910	LIQUID		1.75G/CC	MILD	WA
2004	MERCURY CONTAMINATED EQUIPMENT	SMCRI-DL	9742	SOLID	NA	NA	NA	ME
2004	MERCURY CYANIDE	DECON KIT-299		SOLID			MILD	ME
2004	RANGE SAND/DUST	BLDG 60	LSG	SOLID	6.9	15LBS/GAL	NONE	WA
2004	SODIUM BICHROMATE	PLATING	7910	SOLID	NA	1.2G/CC	NONE	WA
2004	SODIUM BICHROMATE-UNUSED	PLATING	7910	SOLID	NA	1.2G/CC	NONE	WA
2004	UCON C SLUDGE	HEAT TREAT	7930	SOLID	8.8	9.4G/CC	NONE	WA
2004	WASTE STOPOFF WAX	PLATING	7910	SOLID	6-7	8.3LB/GL	NONE	WA
2004	WASTE WATER/AG RECOVERY	DRMO		LIQUID	5.8	8.5LBS/GL	STRONG	WA
2126	EMISSION CONTROL DUST	FOUNDRY	8000	SOLID	7	5LB/GL	NONE	WA
2127	EMISSION CONTROL DUST	RANGE	3812	SOLID	7	12LB/GL	NONE	WA
2304	BLACK OXIDE SALTS-RIA MIXTURE #5	PLATING	7910	SOLID	14	2.14G/CC	NONE	WA
2304	BLACK OXIDE/INSULATION	PLATING	7910	SOLID	14	2.14G/CC	NONE	WA
2304	CORE WASH-REFCOHOL	FOUNDRY	8000	LIQUID	NA	1.8G/CC	STRONG	WA
2304	ETHANOL CAPSULES	DECON KIT-299		LIQUID	6-8	.8-1.2G/CC	MILD	WA
2304	FLAMMABLE LIQUID MIXTURE	MEDICAL SURPLUS		LIQUID	6-8	.8-10G/CC	STRONG	FL
2304	IRIDITE 4P4	PLATING	7910	SOLID	<2	1.5G/CC	NONE	WA
2304	LIQUID SCINTILLATION FLUID	SMCRI-SEM	3822	LIQUID	7	.94G/CC	MILD	WA
2304	OAKITE NRP	PLATING	7910	LIQUID	>11.5	1.2G/CC	MILD	WA
2304	RODINE 50	PLATING	7910	LIQUID	<2	1.05G/CC	MILD	WA
2307	CELLULOSE NITRATE ADHESIVE			SEMI-SOLID		71.7G/CC	STRONG	FL
2307	EPOXY RESIN ADHESIVE			LIQUID		1.2-1.5G/CC	MILD	WA
2307	MASTIC ADHESIVE	DL		SEMI-SOLID	4-7	.7-.9G/CC	STRONG	CE
2363	SODIUM NITRATE MIXTURE	OXIDIZER		LIQUID	2-6		MILD	SO
2924	WASTE WATER TREATMENT SLUDGE	PLATING SHOP	7910	SEMI-SOLID	8.5	7.4LB/GL	STRONG	WA
2928	CHROMIC ACID AND PB SLUDGE	PLATING	7910	LIQUID	<2	10LBS/GAL	MILD	WA
2928	CHROMICOAT T-3	PLATING	9064	SOLID		1.2G/CC	NONE	WA
2928	CHROMIUM PLATING SLUDGE	PLATING SHOP	7910	SEMI-SOLID	<2	11LB/GL	MILD	WA

8	9	10	11	12	13
IPPING NAME	HAZARD CLASS	UN/NA #	CODE	EPA# (S)	PPE
STE POISON B SOLID,NOS	POISON B	UN2811	R,T	D003	2
THIUM BATTERIES FOR DISPOSAL			R	D003	2
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	I,C	D002,D001	1
LUENE SULFONIC ACID	CORROSIVE MATERIAL	UN2584	C	D001	1
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760	C	D002,F001	1,5
STE FLUOBORIC ACID	CORROSIVE MATERIAL	UN1775	C	D002	1
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760	C,T	D002,D006,D007,D008	1
DROFLUORIC ACID SOLUTION	CORROSIVE MATERIAL	UN1790	C	D002	1
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1790	C	D002	1
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760	C,E	D002,D007	1
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760	C	D002	2
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760	C	D002	2
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760	C,T	D002,D006,D007,D008	1
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760	C	D002	1
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1790	C	D002	1
STE CORROSIVE SOLID,NOS	CORROSIVE MATERIAL	UN1759	NA	NONE	1
STE CORROSVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760	C	D002	1
STE CORROSVIE SOLID,NOS	CORROSIVE MATERIAL	UN1759	NA	NONE	1
STE SODIUM HYDROXIDE,SOLID	CORROSIVE MATERIAL	UN1823	NA	NA	1
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	C,E	D002,D008	1
STE LEAD FLUOBORATE	ORM-B	NA2291	E	D008	1
RCURY METALLIC	ORM-B	NA2809	E	D009	7
RCURIC CYANIDE SOLID	POISON B	UN1636	E,R	D003,D009	7
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D006,D007,D008	7
STE SODIUM DICHROMATE	ORM-A	NA1479	E	D007	1
STE SODIUM DICHROMATE	ORM-A	NA1479	E	D007	1
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D006,D007,D008	1
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D007,D008	8
ZARDOUS WASTE LIQUID,NOS	ORM-E	NA9189	E	D011	8
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	T	D006,D007,D008	7
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D008	7
STE OXIDIZER,NOS	OXIDIZER	NA9194	I	D001	1
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	I	D001	1
ZARDOUS WASTE LIQUID,NOS	FLAMMABLE LIQUID	NA9189	I	D001	3
ZARDOUS WASTE LIQUID,NOS	FLAMMABLE MATERIAL	NA9189	I	D001	3
AMMABLE LIQUID,NOS	FLAMMABLE LIQUID	UN1993	I	D001	3
STE CHROMIC ACID MIXTURE,DRY	OXIDIZER	NA1463	I,E	D001,D007	1
STE COMBUSTIBLE LIQUID	COMBUSTIBLE LIQUID	UN1133	I	D001	1
STE SODIUM NITRITE	OXIDIZER	UN1500	I	D001	1
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760			1
AMMABLE LIQUID,NOS	FLAMMABLE LIQUID	UN1133	I	D001,F003	3
STE COMBUSTABLE LIQUID	COMBUSTABLE LIQUID	UN1133	I	D001	3
MENT LIQUID,NOS	FLAMMABLE LIQUID	NA1133	I	D001	3
DIUM NITRATE MIXTURE	OXIDIZER	NA1487	I	D001	9
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	T	F006	10
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760	C,E	D002,D007,D008	1
STE CHROMIC ACID SOLUTION	CORROSIVE MATERIAL	UN1755	C,E	D002,D007	1
STE CHROMIC ACID SOLUTION	CORROSIVE MATERIAL	UN1755	C,T	D002,D006,D007	1

DEPARTMENT OF THE ARMY
ROCK ISLAND ARSENAL
ROCK ISLAND, ILLINOIS 61299-5000

REPLY TO
ATTENTION OF:

February 1, 1991

SMCRI-SE

Mr. George J. Hamper
RCRA Permitting Branch (5HR-13)
U.S. Environmental Protection Agency
230 South Dearborn Street
Chicago, Illinois 60604

Dear Mr. Hamper:

Thank you for the alert regarding the new RCRA regulations and potential requirements for this facility. After initial review of 40 CFR Sections 270.14, 270.24, and 270.25 and Subparts AA and BB and the checklist of Subparts AA and BB, it has been determined that the new regulations do not apply to the Rock Island Arsenal Storage Facility. Our RCRA facility stores containers (i.e. drums) in preparation for off-site disposal. There are no tanks or processes associated with the RCRA Storage Facility.

Further information may be obtained from Dr. William Shore, Environmental Coordinator, SCMRI-SEM, telephone (309) 782-7856.

Sincerely,

Achiel M. Dupont, Jr.
Director, Science and
Engineering Directorate

RI 9

USEPA

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-6762

Refer to: 1618130001 -- Rock Island County
Rock Island Arsenal
IL5210021833
RCRA Permit Log No. B-122

January 16, 1991

Commander
Rock Island Arsenal
Attn: SMCRI - SEM (Dr. William Shore)
Rock Island, IL 61299-5000

Dear Dr. Shore:

The Illinois Environmental Protection Agency has reviewed Part B of the RCRA permit application for a hazardous waste container (S01) storage area dated March 30, 1990 and received April 2, 1990 for the above-referenced facility. A list of the deficiencies identified during this initial technical review is included in the attached Notice of Deficiency (NOD).

Each of the deficiencies must be addressed before this Agency can complete the technical review of your permit application. Your response must be submitted in quadruplicate and postmarked no later than March 1, 1991. The response should be in a format which allows incorporation of the new information into the appropriate sections of your application. To allow for a proper review of this new information, the location of the response to each deficiency should be identified in a list cross-referencing these items. Each revised page or drawing must have the revision date identified on them for tracking purposes.

A certification identical to that outlined in 35 Ill. Adm. Code 702.126 must accompany your submission. The original and three copies of the new information and certification should be submitted to the following address:

Illinois Environmental Protection Agency
Division of Land Pollution Control -- #24
Permit Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

If you have any questions regarding this subject, feel free to contact Kevin D. Lesko of my staff at 217/782-6762.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:KDL/mls/0055q/1-2

Enclosure

cc: Division File, w/enclosure
Administrative Record, w/enclosure
Peoria Region, w/enclosure
George Hamper, USEPA Region V, w/enclosure
Planning & Reporting Section

Rock Island Arsenal
1618130001 -- Rock Island County
IL5210021833
B-122
January 16, 1991

Notice of Deficiencies

Initial Technical Review

Subject Requirement: 35 Illinois Administrative Code Subtitle G

B. FACILITY DESCRIPTION

B-1 General Description: 703.183(a)

Breifly describe the processes that generate each hazardous waste at the facility, such as the following:

- Waste Flammables
- W.W.T. Sludge
- Solvents
- Alkaline Derust Sludge
- Quench Wastewaters and Sludge
- Cleaning Compounds

B-2 Topographic Map: 703.183(s), 703.185(c), 703.185(d), 724.195, 724.197

B-2a General Map Requirements: 703.183(s)

The following deficiencies were noted with the maps submitted to meet the map requirements:

- Every map must include a legend which identifies all relevant information. The legend must identify the symbols and line types used to identify items such as facility boundaries, sewers (storm, sanitary, process, etc.), fire hydrants, etc.

- Figure 2-2, page B-19 is not adequate to define the facility boundaries. Clearly define the facility boundaries on a smaller scale map such as Map A, page B-31.

- Provide a legend which identifies how storm sewers and sanitary sewers are distinguished on Map B, page B-31.

- The elevations of the contours of Map D, page B-33 are unreadable.

- The scale of Map A, page 30 is 1 inch equals 500 feet, not 1 inch equals 400 feet as stated on page B-5.

- Describe how the surface flow collected by the dirt embankment (see page B-5) is handled, i.e. how is the water released, and where is it released to.

- Identify all SWMU and hazardous waste units at the site (RIA).

- Map dates are needed on Maps F through I (pages 35-38).

B-3c Other Location Requirements: Section 21(1) of the Illinois Environmental Protection Act

The Part B permit is for storage only not disposal, therefore this section does not apply.

Sections IB-3c.1 Access Control (page B-8), IB-3c.2 Emergency Equipment (page B-9), IB-3c.3 Coordination Agreements (page B-9), and IIB-3c Access Control (page B-15) must be placed in their appropriate sections in accordance with the Agency's RCRA Part B Permit Application Decision Guide.

B-4 Traffic Information: 703.183(j)

Provide an estimate of the volumes including number and types of vehicles traveling within a 1,000 feet of Building 242.

B-5 Operating Record: 724.173

Describe the information which will be documented in the operating record including the following:

1. A description and the quantity of each hazardous waste received, and the method or methods and date or dates of its treatment, storage or disposal at the facility as required by 40 CFR 264, Appendix I.

2. The location of each hazardous waste within the facility and the quantity at each location.

3. Records and results of waste analyses performed as specified in Sections 724.113, 724.117, 724.414 and 724.441, and in 35 Ill. Adm. Code 728.104(a) and 728.107;

4. Summary reports and details of all incidents that require implementing the contingency plan as specified in Section 724.156(j);

5. Records and results of inspections as required by Section 724.115(d);

6. A certification by the permittee, no less often than annually: that the permittee has a program in place to reduce the volume and toxicity of hazardous waste that the permittee generates, to the degree the permittee determines to be economically practicable; and that the proposed method of treatment, storage or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health and the environment.

6004	NICKEL SULFATE	PLATING	7910	SOLID		2.07G/CC	NONE	NON-REGULATED	NA	NA	NA
6004	RESIN/CARBON BLK	FLEX SHOP		SOLID		8LB/GL	NONE	NA	NA	NA	NA
6004	SAFE-T-SOLVENT-D-LIMONE	SMCRI-AO	7400	LIQUID		9LB/GL	STRONG	NA	NA	NA	NA
6004	SILICA	PLATING	7910	SOLID	NA	2.6G/CC	NONE	NON-REGULATED	NA	NA	NA
6004	SODIUM FLUORIDE	PLATING	7910	SOLID	NA	2.78G/CC	NONE	SODIUM FLUORIDE SOLID	ORM-B	UN1690	NA
6004	ZINC CARBONATE	PLATING	7910	SOLID	NA	5.5LBS/GAL	NONE	NON-REGULATED	NA	NA	NA
6120	WASTE ANTIFREEZE	LSG		LIQUID	4-7	.8-1.0G/CC	NONE	NON-REGULATED	NA	NA	NA
6162	OFF SPEC WASTE OIL/PARAFFINS	SMCRI-AO	8500	LIQUID		.8G/CC	MILD	NA	NA	NA	NA
6162	OFF SPEC WASTE OIL/PARRAFINS	PLATING	7910	SOLID	NA	.8G/CC	MILD	NON-REGULATED	NA	NA	NA
6162	SPENT FLUID-VANTROL			LIQUID			NONE	NA	NA	NA	NA

2928	CHROMIUM PLATING SLUDGE,SOLID	PLATING SHOP	7910	SOLID	6-8	<1.7G/CC	MILD	H
2928	COPPER FILTER WASTE	PLATING	7910	SOLID	NA	5.7LBS/GAL	MILD	H
2928	PLATING WASTE-SCRBR 1-SOLIDS	PLATING	7910	SOLID	NA	10LB/GAL	NONE	H
2928	ZINC PHOSPHATE SOLIDS	PLATING	7910	SOLID	NA	13.9LBS/GAL	NONE	H
3104	GLOSS LACQUER	PAINT SHOP		LIQUID	6-8		MILD	H
3104	TRAFFIC PAINT	PAINT SHOP		SEMI-SOLID	6-8	1.2-1.4G/CC	MILD	W
3104	TRAFFIC PAINT	PAINT SHOP		SEMI-SOLID	6-8	1.0-1.2G/CC	MILD	W
3104	ZINC CHROMATE PRIMER	PAINT SHOP		SEMI-SOLID	6-8	<1.7G/CC	MILD	W
3132	CARC PAINT W/SOLVENTS-EPOXY	SMCRI-AO	7420	LIQUID	7	1.5G/CC	MILD	W
3132	WASTE PAINT	PAINT SHOP		SEMI-SOLID	6-8	1.4-1.7G/CC	MILD	W
3132	WASTE PAINT/NAPTHA/NO SOLVENTS	PAINT SHOP		SEMI-SOLID	6-8	1-1.2G/CC	MILD	W
3137	PAINT RELATED WASTE SOLIDS	SMCRI-AO	7420	SOLID	8	10LBS/GAL	NONE	H
3137	WASTEWATER TRMT SLUDGE,PAINT	PAINT BOOTH		LIQUID	8.5	10LB/GL	MILD	H
3138	FILTERS-CR	299		SOLID	6-8	.8-1.0G/CC	MILD	H
3139	SPENT NON-HALOGENATED SOLVENT	PAINT THINNING		LIQUID		8LB/GL	STRONG	W
3142	COLD STRIPPER-METHYLENE CHLORIDE	PAINT	7420	LIQUID	3		STRONG	H
3142	SPENT HALOGENATED SOLVENTS	PAINT		LIQUID	>12.5	8LB/GL	STRONG	H
3944	OFF SPEC OIL/MEK			LIQUID		.8G/CC	MILD	H
3944	OFF-SPEC WASTE OIL/CONTAMINATED	SMCRI-AO	8500	LIQUID		.8G/CC	MILD	H
3944	OIL-111,TCEA	SPENT OIL-DEGREASING		LIQUID	6-8	.7-.8G/CC	MILD	H
3952	CORROSION PREVENTING CMPD			LIQUID		1-1.7G/CC	STRONG	H
3952	CORROSION REMOVER	SMCRI-DL	BLDG 299	LIQUID	>12.5	10LBS/GAL	STRONG	W
3952	CORROSION REMOVER	BLDG 299		LIQUID	>12.5	10LB/GL	STRONG	W
3952	STANISOL SOLVENT-STODDARD	SMCRI-AO	8500	LIQUID	NA	.8G/CC	MILD	H
4204	CYANIDE AND GRAPHITE	HEAT TREAT		SOLID	6-8	.9-1.5G/CC	STRONG	W
4204	CYANIDE SALTS	HEAT TREAT		SOLID	>12.5	11LB/GL	STRONG	W
4205	QUENCH BATH SLUDGE	FORGE SHOP		SEMI-SOLID		7.5LB/GL	STRONG	W
4205	QUENCHANT WASTEWATER	HEAT TREAT		LIQUID	6-9	7.8LB/GL	NONE	W
4205	WASTE CYANIDE MIXTURE	FORGE SHOP		LIQUID	>10	8.5LB/GL	MILD	W
4558	BLANKROLA	REPRO SHOP		LIQUID		.82-.97G/CC	STRONG	W
4584	DEGREASER STILL SLUDGE,TCEA	PAINT BOOTH		SEMI-SOLID		8.5LB/GL	STRONG	H
4597	MOLD RELEASE SPRAY-ZR02	FOUNDRY	8000	LIQUID			STRONG	W
4597	PD680-PET NAPHTHA			LIQUID	6-8		MILD	W
4597	WATER DISPERSANT			LIQUID	6-8	1-1.2G/CC	NONE	W
4602	PET NAPTHA USED			LIQUID		7.1LB/GL	MILD	W
5500	AREA 1 SUMP-PLATING	PLATING	7910	LIQUID	1.9	8.4LBS/GAL	MILD	W
5500	FLOOR SWEEPINGS	PLATING	7910	SOLID	NA	4.4LBS/GAL	MILD	H
5500	PAINT RELATED WASTE CLEANUP	SMCRI-AO	7400	SOLID	8	10LBS/GAL	NONE	H
5500	SPILL RESIDUE-OIL DRY 1&2	PLATING	9064	SOLID	1.8	8LB/GAL	NONE	H
5500	SPILL RESIDUE-OIL DRY 2	PLATING	9064	SOLID	6.8	8LB/GAL	NONE	H
5500	SPILL RESIDUE-OIL DRY 3	PLATING	9064	SOLID	3.8	8LB/GAL	NONE	H
5500	SPILL RESIDUE-SWEEPING 1&2	PLATING	9064	SOLID		8.2LB/GAL	NONE	H
5500	SPILL RESIDUE-WOOD/CR	PLATING	9064	SOLID		3LB/GAL	NONE	H
5604	BENZENE SULFONYL CHLORIDE	UNUSED	3822	LIQUID	1-3		STRONG	W
5604	DIMETHYL SULFATE		9000	LIQUID	1-3	8LB/GL	STRONG	W
5604	FORMALDEHYDE	LABORATORY	3822	LIQUID			MILD	W
5615	LIQUID MERCURY	LABORATORY	3822	LIQUID		13.6LB/GL	NONE	ME
6004	ALUMINUM FLUX-COVERALL 33	FOUNDRY	8000	SOLID			NONE	NA
6004	COPPER SULFATE	PLATING	7910	SOLID	NA	2.28LBS/GAL	NONE	NO
6004	COREPASTE-REFCOSTIX	FOUNDRY	8000	SEMI-SOLID	NA	1.5G/CC	MILD	NO
6004	ELECTROSTATIC SOLUTION	REPRO SHOP		LIQUID	7	11LB/GL	MILD	NO
6004	NICKEL ACETATE	PLATING	7910	SOLID	NA	1.74G/CC	NONE	NO

ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D007	1
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D006,D007	5
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D006,D007,D008	1
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D006,D007,D008	7
ZARDOUS WASTE LIQUID,NOS	FLAMMABLE MATERIAL	NA9189	I,T	D001,F005	3
STE PAINT RELATED MATERIAL	FLAMMABLE LIQUID	UN1263	I,E,T	D001,D008,F005	8
STE FLAMMABLE LIQUID,NOS	FLAMMABLE LIQUID	NA1993	I,E,T	F003,D001,D008,D007	7
STE PAINT RELATED MATERIAL	COMBUSTABLE LIQUID	NA1263	I,E	D001,D007	7
STE PAINT RELATED MATERIAL	COMBUSTABLE LIQUID	NA1263	I,T	D001,F002	5,7
STE PAINT RELATED,NOS	FLAMMABLE LIQUID	UN1263	I,E,T	F002,F005,D001	1
STE PAINT RELATED,NOS	FLAMMABLE LIQUID	UN1263	I,E	D001,D007	1,7
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D006,D007,D008	8
ZARDOUS WASTE LIQUID,NOS	ORM-E	NA9189	E	D007	7
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D007	7
STE FLAMMABLE LIQUID,NOS	FLAMMABLE LIQUID	UN1993	I	F003	3
ZARDOUS WASTE LIQUID,NOS	ORM-E	NA9189	T,C	F001,D002	2,5
ZARDOUS WASTE LIQUID,NOS	ORM-E	NA9189	T	F002	5
ZARDOUS WASTE LIQUID,NOS	ORM-E	NA9189	T,E	F001,F005,D035	1
ZARDOUS WASTE LIQUID,NOS	ORM-E	NA9189	T,E	D035,F001,F005	1
ZARDOUS WASTE LIQUID,NOS	ORM-E	NA9189	T	F001	5
ZARDOUS WASTE LIQUID,NOS	COMBUSTIBLE LIQUID	NA9189	I	D001	3
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760	C	D002	1,5
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760	C	D002	1,5
ZARDOUS WASTE LIQUID,NOS	ORM-E	NA9189	T,E	D018,D035,F001	1
STE POISON B SOLID,NOS	POISON B	UN2811	R	D003	2
STE POISON B SOLID,NOS	POISON B	UN2810	R	D003	2
STE POISON B SOLID,NOS	POISON B	UN2811	R,T	F010	1
STE POISON B LIQUID,NOS	POISON B	UN2810	T	F012	1
STE POISON B SOLID,NOS	POISON B	UN2810	R	F011	1
STE COMBUSTIBLE LIQUID,NOS	COMBUSTIBLE LIQUID	NA1993	I,T	F001,D001	3,5
ZARDOUS WASTE LIQUID,NOS	ORM-E	NA9189	E,T	F001,D006,D007,D008	5
STE FLAMMABLE LIQUID,NOS	FLAMMABLE LIQUID	NA1993	I	F003,D001	3
STE COMBUSTIBLE LIQUID,NOS	COMBUSTIBLE LIQUID	NA1993	I	D001	9
STE FLAMMABLE LIQUID,NOS	FLAMMABLE LIQUID	UN1993	I	D001	1
STE PETROLEUM NAPTHA	FLAMMABLE LIQUID	UN1255	I	D001	9
STE CORROSIVE LIQUID,NOS	CORROSIVE MATERIAL	UN1760	C,E	D002,D006,D007	1
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D006,D007,D008	7
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D006,D007,D008	7
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D007,D008	8
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D007	8
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D006,D007	8
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D007	8
ZARDOUS WASTE SOLID,NOS	ORM-E	NA9189	E	D007	8
STE BENZENE SULFONYL CHLORIDE	CORROSIVE MATERIAL	UN2225	C,R	U020	1
STE DIMETHYL SULFATE	CORROSIVE MATERIAL	UN1595	T	U103	1
STE FORMALDEHYDE SOLUTION	ORM-A	UN1198	T	U122	3
RCURY METALLIC	ORM-B	NA2809	T	U151	3
	NA	NA	NA	NA	3
N-REGULATED	NA	NA	NA	NA	GLOVES,GL
N-REGULATED	NA	NA	NA	NA	GLOVES,GL
N-REGULATED LIQUID	NA	NA	NA	NA	2
N-REGULATED	NA	NA	NA	NA	GLOVES,GL

7. Records of the quantities (and date of placement) for each shipment of hazardous waste placed in land disposal units under an extension of the effective date of any land disposal restriction granted pursuant to 35 Ill. Adm. Code 728.105, a petition pursuant to 35 Ill. Adm. Code 728.106 or a certification under 35 Ill. Adm. Code 728.108, and the applicable notice required of a generator under 35 Ill. Adm. Code 728.107(a).

8. For an on-site storage facility, the information contained in the notice (except the manifest number), and the certification and demonstration if applicable, required of the generator or the owner or operator under 35 Ill. Adm. Code 728.107 or 728.108.

C. WASTE CHARACTERISTICS

C-1 Chemical and Physical Analyses: 703.183(b), 724.113(a)

Describe how each hazardous waste stream, to be stored in the unit, is generated. A laboratory waste analyses report detailing the chemical and physical analyses of representative samples of each waste stream must be provided.

The only exception to the need for laboratory reports is for off-spec material i.e. material that has not been used in any processes. Material Safety Data Sheets or other published information may be provided for each off-specification material, to be stored in the unit, in lieu of the laboratory reports.

Table 3-2, page C-13, should be referenced in this section.

C-1a Containerized Waste: 703.201(b)(1)

Section C-1a does not apply to this unit since all waste stored in the unit is provided with secondary containment.

Revise this section and place C-1a.1 Waste Management, C-1a.2 Waste Characterization, and C-1a.3 Waste Handling into the appropriate section of the application in accordance with the Agency's RCRA Part B Permit Application Decision Guide.

C-2 Waste Analysis Plan: 703.183(c), 724.113(b) and (c)

C-2a Parameters and Rationale: 724.113(b)(1)

Each hazardous waste stream, including the listed hazardous waste, must be analyzed for all hazardous characteristics and constitutents of all materials handled at the facility.

The TCLP test has replaced EP Toxicity in determining the characteristic of toxicity. TCLP should include all metals.

A waste may be characteristically hazardous due to corrosivity based on its pH and/or the rate at which it corrodes steel, see 35 Ill. Adm. Code Part 721.122. If any wastestream at the facility has this characteristic, the appropriate test method should be included.

A listed hazardous waste may also be characteristically hazardous, e.g. spent paint stripping solvents may also be hazardous due to metals, and if so, the waste should be identified as such.

C-2c **Sampling Methods:** 724.113(b)(3), 40 CFR 261 - Appendix I

List sampling methods used to obtain a representative sample of <u>each</u> waste to be analyzed and document that the method is appropriate. Include a discussion of the following:

- The chain of custody procedures used
- Sample identification
- Preservation of the samples
- Sample containers

The first paragrpah of Section C-2c, page C-6, states,

> "When necessary, two 1-quart samples of a hazardous waste stream are obtained in accordance with pp. 3.0 to 3.3-2 from "Test Methods for Eval;uating Solid Waste, Physical/Chemical Methods" (Environmental Protection Agency Office of Water and Waste Management, SW-846. . ."

Obtaining two 1-quart samples contradicts Table 3-6, page C-19. The reference to pp. 3.0 to 3.3-2 could not be located. Clarify the reference, include the volume, chapter, edition, etc. and resolve the above contradiction.

C-2e **Additional Requirements for Wastes Generated Off-Site:** 724.113(c)

RIA may not accept hazardous waste from off-site sources, whether manifested or unmanifested. The procedures specified in 35 Ill. Adm. Code 724.176 (40 CFR 264.76), for receipt of unmanifested waste, do not apply to onsite storage facilities, see 35 Ill. Adm. Code 724.170.

C-2f **Additional Requirements for Ignitable, Reactive or Incompatible Wastes:** 724.113(b)(6), 724.117

Describe the methods used to meet additional waste analysis requirements necessary for treating, storing, or disposing ignitable, reactive or incompatible wastes. All wastes should be classified for compatibility pursuant to 40 CFR 264 Appendix V and pages B9A-9F of USEPA OSWER Doc. #9938.4.

C-2g Waste Analysis Requirements for Land Disposal Ban

Describe the methods which will be utilized to comply with the land disposal restriction of 35 IAC 728.

D. PROCESS INFORMATION

D-1 Containers

D-1a Containers with Free Liquids

D-1a(1) Description of Containers: 724.271, 724.272

Provide the following information about the containers used to store hazardous waste: approximate number of <u>each</u> type of container, construction materials, dimensions and usable volumes, DOT specifications or other manufacturer specifications, liner specifications (if applicable), container condition (new, used, reconditioned), and markings and labels. Note, this includes the original containers for the off-specification material.

D-1a(2) Container Management Practices: 724.273

Describe the container management practices use for the off-spec material in original containers.

D-1a(3) Secondary Containment System Design and Operation: 703.201(a)(1), 724.275(a) and (d)

Figures 2-17 (page D-13) through 2-20 (page D-16) are not adequate. The scale of all of the drawings are not accurate and many of the details are unreadable. Provide design and profile drawings of the existing or planned container storage area(s), showing the secondary containment systems and the arrangement of containers. Indicate on the drawings the areas in which incompatible wastes will be stored. Wastes which are incompatible may not be stored within the same secondary containment system. Waste must also be prevented by use of barriers or other means from falling and/or spilling into adjacent containment systems where incompatible materials are stored.

D-1a(3)(a) Requirement for the Base or Liner to Contain Liquids: 724.275(b)(1)

Demonstrate the capability of the base to contain liquids, including:

- A statement that the base is free of cracks or gaps;
- Demonstration of imperviousness of base to wastes and precipitation;

- Base design and materials of construction;
- An engineering evaluation of the base's structural integrity; and
- Discussion of compatibility of the base with wastes.
- Demonstrate that the epoxy coatings and joint sealing materials are compatible with the waste to be stored in the storage areas.

D-1a(3)(b) Containment System Drainage: 703.201(a)(2), 724.275(b)(2)

Describe the removal of spilled liquids from the 6 containment cabinets. Do the drums in the cabinets have to be removed to cleanup the spill?

This section states that the containers will be stored on wooded pallets. However, this conflicts with Section D-1a(2).5, page D-6, which indicates that drums may be stored on the floor of the drum storage area.

D-1a(3)(c) Containment System Capacity: 703.201(a)(3), 724.275(b)(3)

The demonstration of the containment capacity does not discuss the volume displaced by the containers and other structures including the storage cabinets in the containment system. This demonstration must be made for each containment area that holds incompatible waste, e.g. the cabinets for flammable waste.

D-1a(3)(e) Removal of Liquids from Containment System: 703.201(a)(5), 724.275(b)(5)

References to other sections of the applciation must be specific. This section should specifically reference the section of the contingency which addresses the cleanup of spills, or the cleanup should be described in this section.

D-1b Containers Without Free Liquids

D-1b(1) Test for Free Liquids: 703.201(b)(1), 729.320

Submit the test results or other documentation or information to show that the wastes to be stored do not contain free liquids (e.g. EPA Method No. 9095). Visual inspection of the waste to determine if it contains free liquid is not adequate.

D-1b(2) Description of Containers: 724.271, 724.272

See comment on Item D-1a(1).

D-1b(3) Container Management Practices: 724.273

See comments on Item D-1a(2).

D-1b(4) Container Storage Area Drainage: 703.201(b)(2), 724.275(c)

See comments on Item D-1a(3).

F PROCEDURES TO PREVENT HAZARDS

F-1 Security: 703.183(d), 724.114

F-1a Security Procedures and Equipment: 703.183(d), 724.114

Unless a waiver is granted, the facility must have either a 24-hour surveillance systems or a barrier and a means to control entry.

F-1a(1) 24-Hour Surveillance System: 703.183(d), 724.114(b)(1)

Random security patrols on a 24-hour basis does not satisfy the requirement for continuous monitoring of the storage area. If this requirement is not met, Sections F-1a(2) and F-1a(2)(b) must be satisfied.

F-1a(2) Barrier and Means to Control Entry: 724.114(b)

F-1a(2)(a) Barrier: 724.114(b)(2)(A)

The fence and natural barrier does not surround the storage area. Since the security gates at the entrances to the facility are not manned 24-hours a day, persons could drive onto the facility and into the area of Building 242 (the storage area) unchecked unless stopped by the random patrols.

F-1a(3) Warning Signs: 724.114(c)

Describe the location(s) of the warning signs which read "Danger -- Unauthorized Personnel Keep Out."

F-2 Inspection Schedule: 703.183(e), 724.115

F-2a General Inspection Requirements: 703.183(e), 724.115(a) and (b), 724.133

Specify where the inspection schedule and the inspection log sheet will be kept.

Table 3-7 should be referenced in this section.

F-2a(1) Types of Problems: 724.115(b)(3)

The inspection log sheet (Figure 2-21, page F-11) must include all of the items specified in Tables 3-7 and 3-8.

F-3b Aisle Space Requirement: 724.135

How much aisle spacing is there, between the pallets of waste, perpendicular to the 6 foot main aisle. A figure showing the arrangement of containers is needed, as required in Item D-1a(3)(a).

F-4 Preventive Procedures, Structures and Equipment: 703.183(h)

F-4a Unloading Operations: 703.183(h)(1)

Describe the procedures used when placing the off-spec materials in their original containers into the storage area.

F-4d Equipment and Power Failure: 703.183(h)(4)

Emergency lighting should be provided within the building. In the event of a power outage this would allow personnel to safely exist the area.

F-5 Prevention of Reaction of Ignitable, Reactive and Incompatible Wastes

F-5a Precautions to Prevent Ignition or Reaction of Ignitable or Reactive Waste:
703.183(i), 724.117(a), 724.131

Page F-9 indicates that there are no open flames within the building. However, Section D-1a(1).3, page D-3, indicates that gas heaters are used and typically these have open flames. Clarify this issue.

Specify the safety standards that the electrical equipment meets.

F-5d Management of Incompatible Wastes in Containers: 703.201(d), 724.277

Describe the procedures used to ensure that incompatible wastes, or incompatible wastes and materials are not placed in the same containers or in an unwashed container that previously held incompatible waste or material. If a storage container holds a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments, document that the wastes are separated from the other material or protected from them by means of a dike, berm, wall or other device. See item C-2f above for compatibility classifications.

G. **CONTINGENCY PLAN:** 703.183(g), 724.137, 724.150 through 724.156, 724.152(b)

Table 1 of the Spill Prevention Controll and Counter Measures Plan (Appendix H) does not include the materials stored in Building 242.

The Installation Spill Contingency Plan (ISCP) also in Appendix H, must note that Building 242 has a unique contingency plan and that spills should be handled as specified in this plan. A copy of building 242's contingency plan must be incorporated into the ISCP.

G-1 General Information

Provide the facility location and site plan.

G-3 Implementation: 724.151(b), 724.152(a), 724.156(d)

Describe how and when the contingency plan will be implemented. Page G-4 seems to indicate that the Emergency Coordinate may or may not implement the Contingency Plan depending on the event. If so describe the criteria used to determine when the contingency plan will be implemented.

G-4 Emergency Response Procedures: 724.156

The contingency plan must include the necessary information and descriptions to satisfy the requirements of 35 IAC Part 724.156. The contingency plan must demonstrate that the following information was considered, at a minimum, in the development of the plan.

a. type, amount, and variety of waste in the unit(s).

b. location of waste.

c. waste handling practices.

d. possible hazards that may result from a release, fire, or explosion (e.g., the effects of any toxic, irritating or asphyziating gases that are generated, or the effects of any hazardous surface water run-off from water or chemical agents used to control fire and heat-induced explosions). This requires an estimation of the types and quantities of gases that may be generated.

e. the effects of weather conditions in the event of a release, fire, or explosion.

f. identify the possible hazards to human health or the environment (on-site and off-site) that may result from a release, fire, or explosion.

g. describe how the emergency coordinator (EC) will determine if a release, fire or explosion could threaten human health or the environment outside the facility. Identify the type of information and criteria the EC would use in arriving at such a determination. In addition, estimate the time it would take to make such a determination and compare that to the time it would take material resulting from a release, fire or explosion to travel off-site.

h. how will the EC determine if evacuation of local areas may be advisable? As in g. above, identify the type of information and criteria the EC will use and make a time comparison of the time necessary to make such a determination to the time an off-site impact is estimated to occur.

i. who will the EC notify if evacuation of the local areas is determined to be advisable?

An evaluation of this information may necessitate a change in the design or operation of the facility pursuant to 35 IAC 724.131.

G-4a Notification: 724.156(a)

Describe the methodology for immediate notification of facility personnel in the vicinity of the storage area and necessary state or local agencies.

G-4b Identification of Hazardous Materials: 724.156(b)

Describe procedures to identify the character, exact source, amount and area extent of any released material involved in the emergency.

G-4c Assessment: 724.156(c) and (d)

See item G-4 above. The assessment must consider both direct and indirect effects of the release, fire or explosion. The authorities to be notified should include the Illinois Environmental Protection Agency, Emergency Response Unit, the Illinois Emergency Services and Disaster Agency, the National Response Center, and those entities related to 35 IAC 724.153(b).

G-4d Control Procedures: 724.152(a)

In the event of an emergency, specify the minimum safe distance of evacuation away from the building.

Demonstrate that the type of respiratory protection and protective garments to be used in the cleanup or spills is adequate for all types of waste stored in the unit. If the protective equipment is not compatible with all of the waste streams, describe how the correct equipment is chosen during an emergency.

G-4i Container Spills and Leakage: 724.152, 724.271

Specify procedures to be used when responding to container spills or leakage, including procedures and timing for expeditious removal of spilled waste and repair or replacement of the container(s). See Item G-4d above.

G-6 Coordination Agreement Requirements: 724.137, 724.152(c), 724.153(b)

Describe the emergency coordination agreements with local police and fire departments, hospitals, contractors, and state and local emergency response teams to familiarize them with the facility and actions needed in case of emergency. Document agreements and/or refusals to enter into a coordination agreement. Note that 35 IAC 724.153(b) requires that a copy of the contingency plan and all revisions must be sent to all local police and fire departments, hospitals and State and local emergency response teams that may be called upon to provide emergency services.

G-7 Evacuation Plan: 724.152(f)

Map L could not be located in the application.

G-8 Required Reports: 724.156(i) and (j)

Describe the procedures which will be utilized to:

- Document in the operating record for the facility the time, date and details of any incident that requires implementation of the contingency plan.
- Notify the Agency's Division of Land Pollution Control (DLPC) Planning and Reporting Section and Field Operations Section and the Illinois ESDA that clean-up operations have been completed and that the emergency equipment has been cleaned and is fit for its intended use.
- Submit a report to the DLPC Planning and Reporting Section within 15 days after the incident has occurred which includes the following information:
  - Name, address and telephone number of the owner or operator;
  - Name, address and telephone number of the facility;
  - Date, time and type of incident (e.g., fire, explosion);
  - Name and quantity of material(s) involved;
  - The extent of injuries, if any;

- An assessment of actual or potential hazards to human health or the environment, where this is applicable; and

- Estimated quantity and disposition of recovered material that resulted from the incident.

H. PERSONNEL TRAINING: 703.183(1), 724.116

H-1 Outline of the Training Program: 724.116(a)(1)

H-1a Job Title/Job Description: 724.116(d)(1) and (d)(2)

Identify all acronyms used in the application.

Describe the minimum qualifications for each job position.

H-1b Training Content, Frequency and Techniques: 724.116(c) and (d)(3)

See page 1 of Appendix M, the EP Toxicity test for determining if a waste is characteristically hazardous has been replaced by the TCLP.

Appendix M must note that the reporting requirements for spills in the hazardous waste storage area are specified in the Contingency Plan for Building 242.

H-1c Training Director: 724.116(a)(2)

Describe the minimum qualifications of the training director.

I. CLOSURE AND POST-CLOSURE REQUIREMENTS: 703.183(m), 724.210 through 724.220

I-1 Closure Plans: 703.183(m), 724.212

I-1d(1) Closure of Containers: 724.278

The facility and equipment shall be decontaminated by steam cleaning and triple rinsing, wipe samples will not be required.

Soil samples shall be analyzed for all hazardous constituents of the waste that has been stored in the unit over its life.

Soil samples shall be obtained from beneath any cracks, joints or other defects that are found that would allow waste to migrate to the soil.

J. OTHER FEDERAL LAWS: 703.183(t)

Demonstrate compliance with the requirements of applicable Federal laws such as the Clean Air Act, Clean Water Act, the Wild and Scenic Rivers Act, National

Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Management Act, and Fish and Wildlife Coordination Act. Provide all relevant documentation.

K. PART B CERTIFICATION: 703.182

K-1 Facility Certification: 703.182, 702.126

The certification letter must contain the wording required in 35 Ill. Adm. Code 702.126(d).

K-2 Engineering Certification: 703.182, Illinois Professional Engineering Act

Technical data, such as design drawings, specifications and engineering studies, must be certified (sealed) by a Professional Engineer who is licensed to practice in the State of Illinois in accordance with Ill. Rev. Stat., par. 5101, Sec. 1 and par. 5119, Sec. 13.1.

The engineering certification must specifically list by date, revision number, etc. all documents which are being certified or each document must be sealed by the engineer.

L. CONTINUING RELEASES AT PERMITTED FACILITIES [§3004(U)]

Provided a list of all solid waste management units (SWMU) at the facility and the information required in Item L-1 through L-2a. References to other parts of the application must be specific. Referencing Appendix L for the information required below is not acceptable. If information from Appendix L of the application will be used to meet the requirements below, the information must be specifically referenced (i.e. by page number at a minimum) for each SWMU and requirement.

L-1. Solid Waste Management Units

Identify each solid waste management unit at the facility. A solid waste management unit includes any unit which is not a "regulated unit" and may include any of the following:

- Landfill
- Surface impoundment
- Waste pile
- Land treatment unit
- Injection well

- Incinerator
- Tank (including wastewater treatment units, elementary neutralization units, and tanks used in reuse/recovery operations)
- Container
- Storage area, transfer station or waste recycling operation.

L-1a Characterize the Solid Waste Management Unit

For each solid waste management unit, submit the following information:

- Type of each unit
- Location of each existing or closed unit on the topographic map. [See comment B-2.]
- Engineering drawings for each unit, if available
- General dimensions of each unit
- Dates when the unit was in operation
- Description of the materials or wastes placed in each unit
- Quantity or volume of waste, if known

L-2 Releases

Provide all information available on whether or not any releases have occurred from any of the solid waste management units at the facility. Reasonable efforts to identify releases must be made, even if releases have not been verified. (A release may include: spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment. It does not include releases otherwise permitted or authorized under law or discharges into the injection zone of a UIC permitted class I injection well.)

L-2a Characterize Releases

Information on releases must include the following types of available information concerning prior or current releases:

- Date of the release
- Type of waste or constituent released

- Quantity or volume released

- Nature of the release

  -- Spill
  -- Overflow
  -- Ruptured pipe or tank
  -- Other

- Groundwater monitoring and other analytical data available to describe nature and extent of release. If other than groundwater monitoring data, please describe.

- Physical evidence of distressed vegetation or soil contamination

- Historical evidence of releases such as tanker truck accidents

- Any state, local or federal enforcement actions which may address releases

- Any public citizen complaints about the facility which could indicate a release

- Any information showing the migration of the release.

KL/mls/sp0055q/1-17

122 Part 2

USEPA

Rock Island Co. 1618130001

DEPARTMENT OF THE ARMY
ROCK ISLAND ARSENAL
ROCK ISLAND, ILLINOIS 61299-5000

July 27, 1990

REPLY TO
ATTENTION OF:
SMCRI-SE

Mr. Lawrence W. Eastep
Illinois Environmental Protection Agency
Division of Land Pollution Control -- #24
Permit Section
Post Office Box 19276
Springfield, Illinois 62794-9276

Dear Mr. Eastep:

Rock Island Arsenal requests a delay in the submission of the Part B application as discussed between Ms. Amy Dragovich from your office and Dr. William Shore, Rock Island Arsenal Environmental Coordinator.

The amended Part B will be postmarked no later than August 31, 1990. The delay is in part due to the fact that resources normally involved in preparing the document were committed to providing preparatory documents and assistance to Mr. Mitch Smith, IEPA, during his 2-week RCRA Facility Assessment for the Part B. The comments and sites visited will be considered when the Part B application is amended.

Rock Island Arsenal will proceed on the assumption that the extension is granted unless officially notified to the contrary.

Please contact the Environmental Coordinator, Dr. William Shore, SMCRI-SEM, telephone (309) 782-7855/7856, if you have any questions.

Sincerely,

Achiel M. Dupont, Jr.
Director, Science and
Engineering Directorate

RECEIVED
JUL 30 1990
IEPA-DLPC

USEPA

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-6762

Refer to: 1618130001 -- Rock Island
Rock Island Arsenal
ILD5210021833
RCRA Permit Log No. B-122

June 1, 1990

Commander
Rock Island Arsenal
Attn: SMCRI-SEM (Dr. William Shore)
Rock Island, Illinois 61299-5000

Dear Dr. Shore:

The Illinois Environmental Protection Agency has reviewed Part B of the RCRA permit application for one hazardous waste (S01) container storage area dated March 30, 1990 and received April 2, 1990 for the above-referenced facility. A list of the deficiencies identified during this second completeness review is included in the attached Notice of Deficiency (NOD).

The application must follow the format of the enclosed RCRA Part B Permit Application Decision Guide. Because the current application does not follow this format, a complete revised Part B application must be submitted. Inserts to the current application are not acceptable. References to other parts of the application must be specific; referencing page 33, Section 3.2.1, onwards is not acceptable. Failure to follow the correct format may result in denial of the application for permit.

Each of the deficiencies must be addressed before this Agency can begin the technical review of your permit application. Your response must be submitted in quadruplicate, one original and three (3) copies and postmarked no later than August 1, 1990. To allow for a proper review of this new information, the location of the response to each deficiency should be identified in a list cross-referencing these items. Each revised page or drawing must have the revision date identified on them for tracking purposes.

A certification identical to that outlined in 35 Ill. Adm. Code 702.126 must accompany your submission. The original and three copies of the new information and certification should be submitted to the following address:

Illinois Environmental Protection Agency
Division of Land Pollution Control -- #24
Permit Section
2200 Churchill Road
Post Office Box 19276
Springfield, Illinois 62794-9276

As part of the Agency's Part B review, all applicants will be required to complete the attached prior Conduct Certification Evaluation. Please include this form in your next submittal.

If you have any questions regarding this subject, feel free to contact Kevin D. Lesko of my staff at 217/782-6762.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:KDL:sf/1927n,23-24

Enclosure

cc: Division File, w/enclosure
Administrative Record, w/enclosure
Springfield Region, w/enclosure
George Hamper, USEPA Region V, w/enclosure
Compliance Section

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

Rock Island Arsenal
1618130001 -- Rock Island
June 1, 1990
B-122

Notice of Deficiencies

Second Completeness Review

Subject Requirement: 35 Illinois Administrative Code Subtitle G

A. Part A Application: 702.123, 702.126(a) and (d), 703.181

- The Part A in the application must have original signatures.

B. FACILITY DESCRIPTION

B-1 General Description: 703.183(a)

Section 2.1 of the application seems to indicate that waste may be accepted from off-site DOD contractors, if this is the case Rock Island Arsenal (RIA) must meet all applicable requirements for facilities accepting waste from off-site.

B-2 Topographic Map: 703.183(s), 703.185(c), 703.185(d), 724.195, 724.197

B-2a General Map Requirements: 703.183(s)

The map must show the container (S01) storage area (building 242) and a distance of 1,000 feet around it, at a scale of 1 inch equal to not more than 200 feet. The map must include: contours sufficient to show surface water flow around facility unit operations, map date, 100-year floodplain area, surface waters, and map orientation. The map should also indicate the location of access control, injection and withdrawal wells, structures, loading and unloading areas, fire control facilities, flood control or drainage barriers, run-off control systems, and (proposed) new and existing hazardous waste operation units and solid waste management units. Multiple maps may be submitted to meet the above requirements, if necessary, but should be at a scale of 1 inch equal to not more than 200 feet. Identify the hazardous waste unit(s) on all maps. The above information should also be provided for the entire Rock Island Arsenal at a scale which is large enough to encompass the facility on one or two maps.

B-3b Floodplain Standard: 703.184(c), 724.118(b)

Document whether or not the facility is located within a 100-year floodplain, and include the source of data (Federal Insurance Administration Map or equivalent maps and calculations). The location of the 100-yer floodplain in relation to the hazardous waste storage area cannot be determined from the maps provided. The 100-year floodplain should be located on the maps described in Item B-2a.

Rock Island Arsenal
1618130001 -- Rock Island
June 1, 1990
B-122

B-4 Traffic Information: 703.183(j)

Provide the following traffic-related information:

- Traffic patterns on site;
- Estimated volumes, including number and types of vehicles;

B-5 Operating Record: 724.173

Describe the information which will be documented in the operating record. Also, describe how the operating record will be organized (include copies of log sheets, etc.).

C. WASTE CHARACTERISTICS

C-1 Chemical and Physical Analyses: 703.183(b), 724.113(a)

For each hazardous waste stored, treated or disposed at the facility, describe the waste, the hazard characteristics, the basis for hazard designation, and provide a laboratory report detailing the chemical and physical analyses of representative samples. Classify each waste into the compatibility groups identified in 40 CFR Part 264 Appendix V.

Appendix A does not include laboratory reports, as required by the regulations, but does include "Waste Characterization Data" sheets. The following deficiencies and questions were noted:

- The laboratory reports should be provided.
- A number of the wastes appear to be misidentified (e.g., chromium plating sludge probably should be F006 rather than D002; iron citrate derust is listed as hazardous due to lead (D008) while no lead is shown in the analyses; cyanide salts from the heat treating process should probably be F010 or F011, in addition to D008 and D006, rather than F015, F015 is not a designated number for a listed waste; emission control dust from an electric arc furnace should be K061 rather than D006, D007 and D008; waste cyanide mixture may be P030 or F011 rather than D003; wastewater treatment sludge - paint with 5% solvents may be F003 or F005 in addition to D006, D007 and D008; degreaser still sudge is probably F001 and not F002.
- Are metals analyses total or EP toxicity?
- An analysis must be provided for all wastes.

Rock Island Arsenal
1618130001 -- Rock Island
June 1, 1990
B-122

C-1a Containerized Waste: 703.201(b)(1)

For owners and operators that store containers of wastes without a secondary containment system, provide the test procedures and results, or other documentation or information, which show that the wastes do not contain free liquids (see D-1b(1)). A suggested test for free liquids in the Paint Filter Liquids Test, Method 9095, in "Test Methods for Evaluating Solid Wastes, Physical Chemical Methods", EPA Publication No. SW-846.

RIA's resonse to the NOD states, "... all wastes stored in building 242 have secondary containment.", this response should be included in the application under Section C-1a.

C-2 Waste Analysis Plan: 703.183(c), 724.113(b) and (c)

Provide a copy of the waste analysis plan that describes the methodologies for conducting the analyses required to properly treat, store, or dispose of hazardous wastes. The waste analysis plan should be site specific for RIA.

C-2a Parameters and Rationale: 724.113(b)(1)

List parameters chosen for analysis and explain the rationale for their selection.

C-2b Test Methods: 724.113(b)(2)

Identify and reference (e.g. EPA Test No. in SW-846) the test methods used to test for parameters chosen.

C-2e Additional Requirements for Waste Generated Off-Site:

If waste from off-site will be accepted at RIA this section must be addressed.

NOTE: Due to time constraints Items C-2c, C-2f, and C-3 of Section C were not reviewed for technical comments.

D. PROCESS INFORMATION

D-1 Containers

D-1a Containers with Free Liquids

Rock Island Arsenal
1618130001 -- Rock Island
June 1, 1990
B-122

D-1a(1) Description of Containers: 724.271, 724.272

Section 3.3.1.2 indicates that only 55 and 85-gallon drums will be stored in building 242, however Section 3.3.2.5 indicates that small containers will be stored in storage cabinets. Clarification of the types of containers to be stored in the (S01) unit (building 242) is needed.

Will hazardous waste be stored in building 169 as indicated in Section 3.3.1.2?

D-1a(2) Container Management Practices: 724.273

Describe container management practices used to ensure that hazardous waste containers are always kept closed during storage, except when adding, or removing or sampling waste, and are not opened, handled, or stored in a manner that may cause them to rupture or to leak.

Clarification of the maximum stacking height and the aisle spacing that will be maintained is needed. Section 3.3.2.3 indicates that aisle spacing of six (6) feet will be maintained and drums will be stored two (2) high in the center and one (1) high around the sides. Section 3.3.2.5 indicates that a ten (10) foot aisle spacing will be used. Section 3.3.2 indicates that barrels will not be stacked more than three (3) high.

NOTE: In order to allow for proper inspection the Agency does not allow the stacking of hazardous waste containers more than two high.

Specify what type and under what conditions safety equipment will be used when handling the containers (see Section 3.3.2.5).

Describe the storage and handling of the small containers (if applicable).

Specify how the incompatible waste is or will be segregated. Section 3.3.2.4 indicates that waste will be segregated in individual rooms, however Section 3.3.3 indicates that the unit is not subdivided but has a single bay and containment cabinets.

Specify the type(s) of container(s) that may be used for each waste stream, identified by the EPA hazardous waste number and name, which is to be stored in the (S01) unit.

NOTE: Maps J and I could not be found in the application.

Rock Island Arsenal
1618130001 -- Rock Island
June 1, 1990
B-122

D-1a(3) Secondary Containment System Design and Operation: 703.201(a)(1), 724.275(a) and (d)

Provide design and profile drawings of the existing or planned container storage area(s), showing the secondary containment system and the arrangement of containers. Indicate on the drawings the areas in which incompatible wastes will be stored.

D-1a(3)(a) Requirement for the Base or Liner to Contain Liquids: 724.275(a)(1)

Demonstrate the capability of the base to contain liquids, including:

- Demonstration of imperviousness of base to wastes;
- Base design and materials of construction;
- An engineering evaluation of the base's structural integrity; and
- Discussion of compatibility of the base with wastes.

Provide the following information for the containment cabinets:

- Demonstrate that the cabinet is compatible with the waste it will store;
- Volume of waste that can be stored;
- Cabinet design and materials of construction.

D-1a(3)(c) Containment System Capacity: 703.201(a)(3), 724.275(b)(3)

Provide calculations which demonstrate that the containment system will have sufficient capacity to contain at least 10 percent of the volume of the containers or the volume of the largest container, whichever is greater. This demonstration must discuss the volume of the largest container, total volume of containers, containment structure capacity, and volume displaced by containers and other structures in the containment system.

Each incompatible waste must have it's own secondary containment system. Provide the demonstration above for each area in which incompatible waste will be stored.

KDL:sf/1927n,25-29

Certified Mail

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-6762

Refer to: 1618130001 -- Rock Island County
Rock Island Arsenal
ILD5210221833
RCRA Permit Log 122
Certified Mail # P115237664

January 4, 1990

Commander
Rock Island Arsenal SMCRI-SEM
Rock Island, Illinois 61299-5000

Gentlemen:

The purpose of this letter is to remind you that your revised RCRA Part B permit application is due April 1, 1990. Unless we receive your revised application by April 1, 1990, the Agency will begin the process of terminating interim status for your facility pursuant to 35 IAC 703.157(b). This would require closure of your RCRA hazardous waste management unit(s).

If you have any questions, contact Charlie Zeal at 217/782-6762.

Very truly yours,

Lawrence W Eastep by CAZ

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:CAZ:kja:0077n

cc: Division File
Peoria Region
Compliance Section
Enforcement
USEPA Region V, George Hamper
Charlie Zeal

George Hamper

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-6762

Refer to: 1618130001 -- Rock Island County
Rock Island Arsenal
IL5210021833
Part B Log #122
RCRA - Permit

December 12, 1988

Commander
Rock Island Arsenal SMCRI-SEM (Dr. Wm. Shore)
Rock Island, IL 61299-5000

Gentlemen:

The Illinois Environmental Protection Agency has reviewed the RCRA Part B permit application for a container storage unit (S01) dated October 14, 1988 and received October 18, 1988 for the above-referenced facility. A list of the deficiencies identified during this initial completeness review is included in the attached Notice of Deficiency (NOD).

The Agency did not receive a completed RCRA Permit Information Form and a Certification Regarding Potential Releases From Solid Waste Management Units. These documents must be provided to the Agency no later than February 1, 1989.

The format of this application is difficult to follow. All pages of the permit application must be sequentially numbered so that the completeness of the document can be assessed. Most applicants have numbered their pages C-1, C-2, etc. so that additions to one section of the permit do not interfere with the page numbering of successive sections.

The packaging of this application does not facilitate the incorporation of revisions. The use of a three-ring binder with maps inserted into map pockets or page protectors would simplify revisions to the application and reduce the chances that loose documents and maps would become separated from the application.

Each of these deficiencies must be addressed before this Agency can continue the completeness review of your permit application. Your response must be submitted in quadruplicate and postmarked no later than April 1, 1990. The response should be in a format which conforms with the organization of the attached NOD. To allow for a proper review of this new information, the location of the response to each deficiency should be identified in a list cross-referencing these items. Each page of the resubmittal should include the date of the revision.

A certification identical to that outlined in 35 Ill. Adm. Code Section 702.126 must accompany your submission. The original and three copies of the new information and certification should be submitted to the following address:

Illinois Environmental Protection Agency
Division of Land Pollution Control -- #24
Permit Section
2200 Churchill Road
P.O. Box 19276
Springfield, Illinois 62794-9276

If you have any questions regarding this subject, feel free to contact Bob Carson of my staff at 217/782-9803.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:RAC:bls/3785j,5,6

Enclosures

cc: Division File, w/enclosure
Peoria Region, w/enclosure
George Hamper, USEPA Region V, w/enclosure ✓
Mary Murphy, USEPA Region V
Compliance Section

1618130001
Rock Island Arsenal
December 12, 1988

NOTICE OF DEFICIENCY

INITIAL COMPLETENESS REVIEW

Subject Requirement: 35 Illinois Administrative Code Section Nos.

A. Part A Application: 702.123, 702.126(a) and (d), 703.181

The application is not complete and/or consistent with the Part B application for the following reasons:

This application does not include tank treatment (T01) as reported in the November 17, 1980 Part A application.

With the October 14 and November 21 submittals, we now have portions of five Part A applications. Only one Part A can be accepted for the facility. Please resubmit a single Part A.

B. FACILITY DESCRIPTION

B-2 Topographic Map: 703.183(s), 703.185(c), 703.185(d), 724.195, 724.197

B-2a General Map Requirements: 703.183(s)

The map must show the facility and a distance of 1,000 feet around it, at a scale of 1 inch equal to not more than 200 feet. The map must include: contours sufficient to show surface water flow around facility unit operations, map date, and legal boundaries of facility site. The map should also indicate the location of injection wells, sewers, loading and unloading areas, fire control facilities, flood control or drainage barriers, run-off control sytsems, and (proposed) new and existing hazardous waste operation units and solid waste management units. Multiple maps may be submitted to meet the above requirements, if necessary, but should be at a scale of 1 inch equal to not more than 200 feet.

B-3b Floodplain Standard: 703.184(c), 724.118(b)

Document whether or not the facility is located within a 100-year floodplain, and include the source of data (Federal Insurance Administration Map or equivalent maps and calculations). Map F shows that Building 169 will be in Zone A8 and that Building 242 is in Zone B. This conflicts with the narrative in Section 3.1.2.

B-3b(1) Demonstration of Compliance: 703.184(d), 724.118(b)

For facilities located within the 100-year floodplain, describe how the facility is designed, constructed, operated, and maintained to prevent washout of any hazardous waste during a flood.

B-3b(1)(a) Flood Proofing and Flood Protection Measures: 703.184(d)(1) and (d)(2)

Provide a structural or other engineering study showing how the design of the hazardous waste units and the flood proofing and protection devices at the facility will prevent washout.

B-3b(1)(b) Flood Plan: 703.184(d)(3), 724.118(b)(1)(A)

Describe the procedures to be followed to remove hazardous waste to a safe location before the facility is flooded, including timing related to flood levels, estimated time to move the waste, the location to which the waste will be moved, demonstration that those facilities will be eligible to receive hazardous waste, the planned procedures, equipment, and personnel to be used, and the potential for accidental discharge of the waste during movement.

B-3b(2) Waiver for Land Storage and Disposal Facilities: 724.118(b)(1)(B)

If a waiver from the Floodplain Standard is requested, the owner or operator must demonstrate that there will be no adverse effects on human health or the environment if washout occurs. The following factors must be considered in this demonstration: the volume and physical and chemical characteristics of the waste; the concentration of hazardous constituents that would potentially affect surface waters; the impact of such concentrations on the current or potential uses of and water quality standards established for the affected surface waters; and the impact of hazardous constituents on the sediments of affected surface waters or the soils of the 100-year floodplain.

B-3b(3) Plan for Future Compliance with Floodplain Standard: 703.184(e)

For facilities located within the 100-year floodplain that do not comply with the floodplain standard, show how and when the facility will be brought into compliance.

B-4 Traffic Information: 703.183(j)

Provide the following traffic-related information:

- Traffic patterns on site;
- Estimated volumes, including number and types of vehicles;
- Traffic control signs, signals and procedures; and

Show the location of traffic control devices on a map which meets the requirements of Item B-2.

C. WASTE CHARACTERISTICS

C-1 Chemical and Physical Analyses: 703.183(b), 724.113(a)

For each hazardous waste stored, treated or disposed at the facility, describe the waste, the hazard characteristics, the basis for hazard designation, and provide a laboratory report detailing the chemical and physical analyses of representative samples.

Appendix A does not include laboratory reports, as required by the regulations, but does include "Waste Characterization Data" sheets. The following deficiencies and questions were noted:

- The laboratory reports should be provided.

- A number of the wastes appear to be misidentified (e.g., chromium plating sludge probably should be F006 rather than D002; waste oil containing greater than 1,000 ppm of 1,1,1-trichloroethane should be F001 or F002 rather than D001; emission control dust from an electric arc furnace should be K061 rather than D006, D007 and D008; waste cyanide mixture may be P030 or F011 rather than D003; wastewater treatment sludge - paint with 5% solvents may be F003 or F005 in addition to D006, D007 and D008; degreaser still sludge is probably F001 and not F002.

- What does Kppm mean?

- Are metals analyses total or EP Toxicity?

- An analysis must be provided for all wastes.

C-1a Containerized Waste: 703.201(b)(1)

For owners and operators that store containers of wastes without a secondary containment system, provide the test procedures and results, or other documentation or information, which show that the wastes do not

contain free liquids (see D-1b(1)). A suggested test for free liquids is the Paint Filter Liquids Test, Method 9095, in "Test Methods for Evaluating Solid Wastes, Physical Chemical Methods", EPA Publication No. SW-846.

C-2 Waste Analysis Plan

C-2f Additional Requirements for Ignitable, Reactive or Incompatible Wastes: 724.113(b)(6), 724.117

Describe the methods used to meet additional waste analysis requirements necessary for treating, storing, or disposing ignitable, reactive or incompatible wastes.

C-3 Quality Assurance: 702.145

Provide a quality assurance plan, in accordance with the standards established in the Third Edition of SW-846, for laboratory analysis of wastes and groundwater.

D. PROCESS INFORMATION

D-1 Containers

D-1a Containers with Free Liquids

D-1a(1) Description of Containers: 724.271, 724.272

Provide the following information about the containers used to treat or store hazardous waste: approximate number of each type of container, construction materials, dimensions and usable volumes, DOT specifications or other manufacturer specifications, liner specifications (if applicable), container condition (new, used, reconditioned), and markings and labels.

D-1a(2) Container Management Practices: 724.273

Describe container management practices used to ensure that hazardous waste containers are always kept closed during storage, except when adding, or removing or sampling waste, and are not opened, handled, or stored in a manner that may cause them to rupture or to leak. Include a discussion of procedures for transporting containers within the facility. Indicate the aisle space maintained between rows of containers and provide the maximum number, volume and stacking height of containers for each area in which containers are stored.

Show the stacking arrangement of containers. Drums should be stacked no more than two high.

D-1a(3) Secondary Containment System Design and Operation: 703.201(a)(1), 724.275(a) and (d)

Provide design and profile drawings of the existing or planned container storage area(s), showing the secondary containment system and the arrangement of containers. Indicate on the drawings the areas in which incompatible wastes will be stored. Note that the secondary containment system requirements also apply to storage areas holding wastes F020, F021, F022, F023, F026 and F027, whether or not these wastes contain free liquids.

D-1a(3)(a) Requirement for the Base or Liner to Contain Liquids: 724.275(a)(1)

Demonstrate the capability of the base to contain liquids, including:

- A statement that the base is free of cracks or gaps;
- Demonstration of imperviousness of base to wastes and precipitation;
- Base design and materials of construction;
- An engineering evaluation of the base's structural integrity; and
- Discussion of compatibility of the base with wastes.

D-1a(3)(b) Containment System Drainage: 703.201(a)(2), 724.275(b)(2)

The base must be sloped or the containment system must be otherwise designed and operated to drain and remove liquids resulting from leaks, spills, or precipitation, unless the containers are elevated or are otherwise protected from contact with accumulated liquids.

D-1a(3)(c) Containment System Capacity: 703.201(a)(3), 724.275(b)(3)

Provide calculations which demonstrate that the containment system will have sufficient capacity to contain at least 10 percent of the volume of the containers or the volume of the largest container, whichever is greater. This demonstration must discuss the volume of the largest container, total volume of containers, containment structure capacity, and volume displaced by containers and other structures in the containment system.

Have water stops been installed in construction joints and between the wall and the floor?

D-1a(4) Removal of Liquids from Containment System: 703.201(a)(5), 724.275(b)(5)

Spilled or leaked waste and accumulated precipitation must be removed from the sump or collection area in a timely manner to prevent overflow of the containment system. Describe the procedures and equipment used during liquid removal. Provide sump, pump and piping drawings, if applicable. Specify the methods for determining whether the removed material is a hazardous waste and for handling as such.

D-1b Containers Without Free Liquids

D-1b(1) Test for Free Liquids: 703.201(b)(1), 729.320

Submit the test results or other documentation or information to show that the wastes to be stored do not contain free liquids (e.g. EPA Method No. 9095).

D-1b(2) Description of Containers: 724.271, 724.272

Provide the following information about the containers used to treat or store hazardous waste: approximate number of each type of container, construction materials, dimensions and usable volumes, DOT specifications or other manufacturer specifications, liner specifications (if applicable), container condition (new, used, reconditioned), and markings and labels.

D-1b(3) Container Management Practices: 724.273

Describe container management practices used to ensure that hazardous waste containers are always kept closed during storage except when adding or removing waste, and are not opened, handled, or stored in a manner that may cause the container to rupture or to leak. Include a discussion of procedures for transporting containers across the facility. Indicate the aisle space maintained between rows of containers and provide the maximum number, volume and stacking height of containers for each area in which containers are stored. Provide a plan view of the container storage area(s) which show(s) the arrangement of the containers.

D-1b(4) Container Storage Area Drainage: 703.201(b)(2), 724.275(c)

Describe how the storage area is designed or operated to drain and remove liquids unless containers are otherwise kept from contact with standing liquids.

F-3 Waiver or Documentation of Preparedness and Prevention Requirements

F-3a Equipment Requirements: 703.183, 724.132

All facilities must be equipped with the following equipment unless the applicant can demonstrate that none of the hazards posed by waste handled at the facility could require that particular kind of equipment. Document that the facility possesses the equipment listed below and provide a description of its capabilities, capacity, etc., as appropriate. Note: The location of this equipment must be identified in the Contingency Plan (Item G-5).

F-3a(1) Internal Communications: 724.132(a)

An internal communications or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel.

F-3a(2) External Communications: 724.132(b)

Describe the device, such as a telephone (immediately available at the scene of operations) or a handheld two-way radio, for summoning emergency assistance from local police departments, fire departments, or state or local emergency response teams.

F-3a(3) Emergency Equipment: 724.132(c)

Demonstrate the availability of and describe portable fire extinguishers, fire control equipment (including special extinguishing equipment - foam, inert gas or dry chemical), spill control equipment, and decontamination equipment.

F-3a(4) Water for Fire Control: 724.132(d)

Demonstrate that the facility has water at adequate volume and pressure to supply water hose streams, foam producing equipment, automatic sprinklers, or water spray systems.

F-3b Aisle Space Requirement: 724.135

Demonstrate that the facility maintains sufficient aisle space to allow the unobstructed movement of personnel, fire protection equipment, or spill control equipment to any area of facility operation in an emergency. Requests for a waiver of the aisle space requirement must be accompanied by a demonstration that aisle space is not needed for any, or all, of these purposes.

F-4 Preventive Procedures, Structures and Equipment: 703.183(h)

Describe procedures, structures, or equipment used at the facility for the following:

F-4b Run-off: 703.183(h)(2)

Prevention of run-off from hazardous waste handling areas to other areas of the facility or environment, or prevention of flooding (e.g., berms, dikes, trenches).

Provide information on run-off prevention for the Building 242 loading/unloading area.

F-4d Equipment and Power Failure: 703.183(h)(4)

Mitigation of effects of equipment failure and power outage.

G-4 Emergency Response Procedures

G-4e Prevention of Recurrence or Spread of Fires, Explosions, or Releases: 724.156(e)

Describe the necessary steps to be taken to ensure that fires, explosions, or releases do not occur, reoccur or spread to other hazardous waste at the facility.

G-4g Incompatible Waste: 724.156(h)(1)

Describe provisions for prevention of incompatible waste from being treated, stored or located in the affected areas until clean-up procedures are completed.

H. PERSONNEL TRAINING: 703.183(1), 724.116

H-1 Outline of the Training Program: 724.116(a)(1)

H-1c Training Director: 724.116(a)(2)

Demonstrate that the program is directed by a person trained in hazardous waste management.

Identify the training director(s) and provide information on their qualifications.

I. CLOSURE AND POST-CLOSURE REQUIREMENTS: 703.183(m), 724.210 through 724.220

I-1 Closure Plans: 703.183(m), 724.212

I-1f Schedule for Closure: 724.212(b)(6)

Provide a schedule for closure of each hazardous waste management unit and for final closure of the facility, including total time to close each hazardous waste management unit and the time required for intervening closure activities. This will allow tracking of the progress of closure.

Note that the Illinois EPA is to be notified rather than the EPA Regional Administrator.

J. OTHER FEDERAL LAWS: 703.183(t)

Demonstrate compliance with the requirements of applicable Federal laws such as the Wild and Scenic Rivers Act, National Historic Preservation Act of 1966, Endangered Species Act, Coastal Zone Management Act, and Fish and Wildlife Coordination Act.

K. PART B CERTIFICATION: 703.182

K-2 Engineering Certification: 703.182, Illinois Professional Engineering Act

Technical data, such as design drawings, specifications and engineering studies, must be certified (sealed) by a Professional Engineer who is licensed to practice in the State of Illinois in accordance with Ill. Rev. Stat., par. 5101, Sec. 1 and par. 5119, Sec. 13.1.

L. CONTINUING RELEASES AT PERMITTED FACILITIES [§3004(U)]

L-1. Solid Waste Management Units

Identify each solid waste management unit at the facility. A solid waste management unit is any unit which is not a "regulated unit" and may include any of the following:

- Landfill
- Surface impoundment
- Waste pile
- Land treatment unit

- Injection well
- Incinerator
- Tank (including wastewater treatment units, elementary neutralization units, and tanks used in reuse/recovery operations)
- Container
- Storage area, transfer station or waste recycling operation.

L-1a Characterize the Solid Waste Management Unit

For each solid waste management unit, submit the following information:

- Type of each unit
- Location of each existing or closed unit on the topographic map. [See comment B-2.]
- Engineering drawings for each unit, if available
- General dimensions of each unit
- Dates when the unit was in operation
- Description of the wastes placed in each unit
- Quantity or volume of waste, if known

L-2 Releases

Provide all information available on whether or not any releases have occurred from any of the solid waste management units at the facility. Reasonable efforts to identify releases must be made, even if releases have not been verified. (A release may include: spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment. It does not include releases otherwise permitted or authorized under law or discharges into the injection zone of a UIC permitted class I injection well.)

L-2a Characterize Releases

Information on releases must include the following types of available information concerning prior or current releases:

- Date of the release

- Type of waste or constituent released
- Quantity or volume released
- Nature of the release
  - -- Spill
  - -- Overflow
  - -- Ruptured pipe or tank
  - -- Other
- Groundwater monitoring and other analytical data available to describe nature and extent of release. If other than groundwater monitoring data, please describe.
- Physical evidence of distressed vegetation or soil contamination
- Historical evidence of releases such as tanker truck accidents
- Any state, local or federal enforcement actions which may address releases
- Any public citizen complaints about the facility which could indicate a release
- Any information showing the migration of the release.

L-2b <u>No Releases</u>

Provide evidence supporting the conclusion that no releases from solid waste management units exist at the facility.

BC:rd/sp3752j/1-11

Facility Name Rock Island Arsenal
State ID No. 1618130001
EPA ID No. IL5210021833
Date Part B Received October 18, 1988
Part B Log No. 122

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
RCRA PART B APPLICATION
INITIAL COMPLETENESS EVALUATION CHECKLIST

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
A. PART A APPLICATION		N				1.0
B. FACILITY DESCRIPTION						
B-1	General description	Y				2.0
B-2	Topographic map	N				2.4, 2.5, 2.6, 2.8
B-2a	General requirements	N				
B-2b	Additional requirements for land disposal facilities	N/A				
B-3a	Seismic standard	Y				
B-3b	Floodplain standard	N				2.9
B-3b(1)	Demonstration of compliance	N				3.1.2
B-3b(1)(a)	Flood proofing and flood protection measures	N				
B-3b(1)(b)	Flood plan	N				
B-3b(2)	Waiver	N				

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
B-3b(3)	Plan for future compliance with floodplain standard	N				
B-3(c)	Other location requirements	N/A				
B-4	Traffic information	N				2.11, 3.1.4
C. WASTE CHARACTERISTICS						
C-1	Chemical and physical analyses, including sampling/analysis methods	N				3.2.1.1, Appendix A
C-1a	Containerized wastes	N				3.2.1.1, Appendix A
C-1b	Waste in tank systems	N/A				
C-1c	Waste in piles	N/A				
C-1d	Landfilled wastes	N/A				
C-1e	Wastes incinerated and wastes used in performance tests	N/A				
C-1f	Wastes to be land treated	N/A				
C-2	Waste analysis plan	Y	N			3.2.1.4
C-2a	Parameters and rationale	Y				3.2.1.4.1
C-2b	Test methods	Y				3.2.1.4.2

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
C-2c	Sampling methods	Y				3.2.1.4.3
C-2d	Frequency of analyses	Y				3.2.1.4.4
C-2e	Additional requirements for wastes generated off-site	Y				3.2.1.4.5
C-2f	Additional requirements for ignitable, reactive or incompatible wastes	N				
C-3	Quality Assurance	N				
D. PROCESS INFORMATION						
D-1	Containers					
D-1a	Containers with free liquids					
D-1a(1)	Description of containers	N				3.3.1
D-1a(2)	Container management practices	N				3.3.2
D-1a(3)	Secondary containment system design and operation					3.3.3
D-1a(3)(a)	Requirement for the base or liner to contain liquids	N				3.3.3
D-1a(3)(b)	Containment system drainage	N				3.3.2.2

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
D-1a(3)(c)	Containment system capacity	N				3.3.3.1
D-1a(3)(d)	Control of run-on	Y				3.3.3.2
D-1a(3)(e)	Removal of liquids from containment systems	N				3.3.3.3
D-1b	Containers without free liquid					
D-1b(1)	Test for free liquids	N				
D-1b(2)	Description of containers	N				
D-1b(3)	Container management practices	N				
D-1b(4)	Container storage area drainage	N				
D-2	Tank Systems	N/A				
F. PROCEDURES TO PREVENT HAZARDS						
F-1	Security					2.8, 3.1.3, 3.4.1
F-1a	Security procedures and equipment					
F-1a(1)	24-hour surveillance system	Y				2.8, 3.1.3
F-1a(2)	Barrier and means to control entry					

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
F-1a(2)(a)	Barrier	Y				
F-1a(2)(b)	Means to control entry	Y				
F-1a(3)	Warning signs	Y				3.4.1.1
F-1b	Waiver					
F-1b(1)	Injury to intruder	N/A				
F-1b(2)	Violation caused by intruder	N/A				
F-2	Inspection schedule					3.4.2
F-2a	General inspection requirements	Y				
F-2a(1)	Types of problems	Y				3.4.2
F-2a(2)	Frequency of inspections	Y				3.4.2
F-2b	Specific process inspection requirements					
F-2b(1)	Container inspection	Y				3.4.2
F-2b(2)	Tank system inspection	N/A				
F-3	Waiver or documentation of preparedness and prevention requirements	N				3.4.3
F-3a	Equipment requirements	N				

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
F-3a(1)	Internal communications	N				
F-3a(2)	External communications	N				
F-3a(3)	Emergency equipment	N				
F-3a(4)	Water for fire control	N				
F-3b	Aisle space requirement	N				
F-4	Preventive procedures, structures and equipment					
F-4a	Unloading operations	Y				3.4.4.1
F-4b	Run-off	N				3.4.4.2
F-4c	Water supplies	Y				3.4.4.3
F-4d	Equipment and power failure	N				3.4.4.4?
F-4e	Personnel protection equipment	Y				3.4.4.5, 3.5.5.1, 2.12
F-5	Prevention of reaction of ignitable, reactive, and incompatible wastes					3.4.5
F-5a	Precautions to prevent ignition or reaction of ignitable or reactive wastes	Y				3.4.5

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
F-5b	General precautions for handling ignitable or reactive waste and mixing of incompatible waste	Y				3.4.5
F-5c	Management of ignitable or reactive wastes in containers	Y				3.4.5
F-5d	Management of incompatible wastes in containers	Y				3.4.5
F-5e	Management of ignitable or reactive wastes in tanks	N/A				
F-5f	Management of incompatible wastes in tank systems	N/A				
F-5g	Management of ignitable or reactive wastes placed in waste piles	N/A				
F-5h	Management of incompatible wastes placed in waste piles	N/A				
F-5i	Management of ignitable or reactive wastes placed in surface impoundments	N/A				
F-5j	Management of incompatible wastes placed in surface impoundments	N/A				

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
F-5k	Management of ignitable or reactive wastes placed in landfills	N/A				
F-5l	Management of incompatible wastes placed in landfills	N/A				
F-5m	Management of ignitable or reactive wastes placed in land treatment units	N/A				
F-5n	Management of incompatible wastes placed in land treatment units	N/A				
G. CONTINGENCY PLAN						
G-1	General information	Y				3.5.1
G-2	Emergency coordinators	Y				3.5.2
G-3	Implementation	Y				3.5.3
G-4	Emergency response procedures					3.5.4
G-4a	Notification	Y				3.5.4.1
G-4b	Identification of hazardous materials	Y				3.5.4.2
G-4c	Assessment	Y				3.5.4.3

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
G-4d	Control procedures	Y				3.5.4.5
G-4e	Prevention of recurrence or spread of fires, explosions, or releases	N				3.5.4.6
G-4f	Storage and treatment of released material	Y				3.5.4.7
G-4g	Incompatible waste	N				
G-4h	Post-emergency equipment maintenance	Y				3.5.4.8
G-4i	Container spills and leakage	Y				3.5.4.5.3 & 4 & 9
G-4j	Tank spills and leakage	N/A				
G-5	Emergency equipment	Y				3.5.5, 2.12
G-6	Coordination agreement requirements	N				3.5.6
G-7	Evacuation plan	Y				3.5.7
G-8	Required reports	Y				3.5.8
H. PERSONNEL TRAINING						
H-1	Outline of the training program	Y				3.6

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
H-1a	Job title/job description	Y				3.6.1.1
H-1b	Training content, frequency and techniques	Y				3.6.1.2
H-1c	Training director	N				3.6.1.3
H-1d	Relevance of training to job position	Y				3.6.1.4
H-1e	Training for emergency response	Y				3.6.1.5
H-2	Implementation of training program	Y				3.6.2
I. CLOSURE AND POST-CLOSURE REQUIREMENTS						
I-1	Closure plans					3.7.1, 3.7.2
I-1a	Closure performance standard	Y				
I-1b	Partial and final closure activities	Y				3.7.1.2
I-1c	Maximum waste inventory	Y				3.7.1.3
I-1d	Inventory removal, disposal or decontamination of equipment, structures and soils	Y				3.7.1.4
I-1d(1)	Closure of containers	Y				3.7.1.4

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
I-1d(2)	Closure of tank systems	N/A				
I-1d(3)	Closure of waste piles	N/A				
I-1d(4)	Closure of surface impoundments	N/A				
I-1d(5)	Closure of incinerators	N/A				
I-1d(6)	Closure of land treatment facilities	N/A				
I-1d(6)(a)	Continuance of treatment	N/A				
I-1d(6)(b)	Vegetative cover	N/A				
I-1e	Closure of disposal units	N/A				
I-1e(1)	Disposal impoundments	N/A				
I-1e(1)(a)	Elimination of liquids	N/A				
I-1e(1)(b)	Waste stabilization	N/A				
I-1e(2)	Cover design	N/A				
I-1e(3)	Minimization of liquid migration	N/A				
I-1e(4)	Maintenance needs	N/A				
I-1e(5)	Drainage and erosion	N/A				

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
I-1e(6)	Settlement and subsidence	N/A				
I-1e(7)	Cover permeability	N/A				
I-1e(8)	Freeze/thaw effects	N/A				
I-1f	Schedule of closure	Y	N			3.7.1.7
I-1g	Extensions of closure time	N/A				
I-2	Post-closure plan	N/A				
I-2a	Inspection plan	N/A				
I-2b	Post-Closure monitoring plan	N/A				
I-2c	Post-Closure maintenance plan	N/A				
I-2d	Land treatment	N/A				
I-3	Notice in deed and certification	N/A				
I-4	Closure cost estimate	N				
I-5	Financial assurance mechanism for closure	N/A				
I-5a	Closure trust fund	N/A				
I-5b	Surety bond					

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
I-5b(1)	Surety bond guaranteeing payment into a closure fund	N/A				
I-5b(2)	Surety bond guaranteeing performance of closure	N/A				
I-5c	Closure letter of credit	N/A				
I-5d	Closure insurance	N/A				
I-5e	Financial test and corporate guarantee for closure	N/A				
I-5f	Use of multiple financial mechanisms	N/A				
I-5g	Use of financial mechanism for multiple facilities	N/A				
I-6	Post-closure cost estimate	N/A				3.7.6, 3.7.7
I-8	Liability requirements	N/A				
I-8a	Coverage for sudden accidental occurrences	N/A				
I-8a(1)	Endorsement or certification	N/A				
I-8a(2)	Financial test for liability coverage	N/A				
I-8a(3)	Use of multiple insurance mechanisms	N/A				

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
I-8b	Coverage for nonsudden accidental occurrences					
I-8b(1)	Endorsement or certification	N/A				
I-8b(2)	Financial test for liability coverage	N/A				
I-8b(3)	Use of multiple insurance mechanisms	N/A				
I-8c	Request for variance	N/A				
I-9	State mechanisms					
I-9a	Use of state-required mechanism	N/A				
I-9b	State assumption of responsibility	N/A				
J. OTHER FEDERAL LAWS		N				3.8
K. PART B CERTIFICATION						
K-1	Facility Certification	Y				p. i
K-2	Engineering Certification	N				
L. CONTINUING RELEASES AT PERMITTED FACILITIES						
L-1	Solid waste management units	N				

		Complete (Y/N)	Technically Adequate (Y/N)	See Attached Comment	See Attached Exhibit	Location of Information
L-1(a)	Characterize the solid waste management unit	N				
L-1(b)	No solid waste management units	N				
L-2	Releases	N				
L-2(a)	Characterize releases	N				
L-2(b)	No releases	N				

BC:jk/3747j,1-15

122 Part B

WSEPA

DEPARTMENT OF THE ARMY
ROCK ISLAND ARSENAL
ROCK ISLAND, IL 61299-5000

REPLY TO
ATTENTION OF
SMCRI-CO

October 14, 1988

RECEIVED
OCT 25 1988
U. S. EPA, REGION V
SWB — PMS

Permit Section, RCRA Unit
Division of Land Pollution Control
Illinois Environmental Protection Agency
P.O. Box 19276, 2200 Churchill Road
Springfield, Illinois 62794-9276

Gentlemen:

The purpose of this letter is to submit a Part B Resource Conservation Recovery Act permit application (one original and two copies) for Rock Island Arsenal. United States Environmental Protection Agency Identification Number IL5210021833 and Illinois Environmental Protection Agency Number 161813000l apply. The original Part A application dated November 17, 1980 has been revised and is included as part of this application. Also included are copies of the Rock Island Arsenal Hazardous Waste Management Plan, the Rock Island Arsenal Spill Contingency Plan, and the specification on the proposed Defense Reutilization and Marketing Office, Hazardous Waste Storage Building 169.

Further information concerning this correspondence may be obtained through the Rock Island Arsenal Environmental Coordinator's office, (309) 782-1491 or Commander, Rock Island Arsenal, ATTN: SMCRI-SEM (Mr. Joseph Cohen), Rock Island, Illinois 61299-5000.

Sincerely,

David T. Morgan, Jr.
Colonel, Ordnance Corps
Commanding

Enclosures

Copy Furnished:

United States Environmental Protection Agency

RECEIVED
OCT 18 1988
IEPA-DLPC

RI (2)

Illinois Environmental Protection Agency 2200 Churchill Road, Springfield, IL 62706

217/782-6761

Refer to: 1618130001 -- Rock Island County
US Army, Rock Island Arsenal
ILD5210021833
RCRA - Permits

May 6, 1988

US Army
Rock Island Arsenal
Rock Island, Illinois 61299

Attn: Environmental Coordinator or
Plant Manager

Dear Sir:

According to Agency files, your facility currently manages hazardous waste in containers and/or tanks subject to the requirements of 35 IAC 700-728. 35 IAC 703.157(f) states that interim status for any hazardous waste storage or treatment facility will be terminated November 8, 1992, unless the facility submits Part B of the RCRA permit application for these units to this Agency by November 8, 1988. This letter is written to (1) make you aware of this requirement and (2) describe the actions which must be taken in response to this requirement.

According to 35 IAC 703.157(f), if an existing facility desires to (1) store hazardous waste on-site for greater than ninety (90) days, (2) treat hazardous waste, or (3) store hazardous waste as a commercial facility after November 8, 1992, it must submit Part B of the RCRA permit application to this Agency by November 8, 1988. The information which must be contained in this application is described in 35 IAC 702, Subpart B. The enclosed document, entitled "RCRA Permit Guidance" provides more detail regarding the necessary contents of the application and also identifies several guidance documents which will be useful in developing the application. Also included in this document is the form which must be used when submitting the application.

If a facility does not desire to continue storing and/or treating hazardous waste after November 8, 1992, it must close the storage and/or treatment unit(s) present at the facility prior to this date. Closure, in this instance, basically means that all contamination must be removed from the unit(s) and if necessary, from the area surrounding these units. The requirements which must be met in closing these units are contained in 35 IAC 726, Subpart G. For your convenience, guidance for the development of a closure plan is contained in the enclosed document entitled "Instructions for the Preparation of Closure Plans for Interim Status RCRA Hazardous Waste Facilities." PLEASE NOTE THAT A CLOSURE PLAN DOES NOT NEED TO BE SUBMITTED AT THIS TIME. IT MUST HOWEVER, BE SUBMITTED TO THE AGENCY NO LATER THAN MAY 8, 1992.

In some instances, there may be several interim status hazardous waste management units at a facility. The facility may desire to pursue a final RCRA permit for a portion of those units and close the rest of them. Because of the uncertainty associated with this option, all interim status units at a facility must be included in Part B of the RCRA permit application, unless a closure plan for the units being closed is submitted with the Part B. If a closure plan is submitted with the Part B, the application need only address those units which will remain in operation.

The only alternatives available for hazardous waste treatment and storage facilities to meet the requirements of 35 IAC 703.157(f) are (1) submit Part B of the RCRA permit application by November 8, 1988 or (2) close by November 8, 1992. However, some facilities may have previously filed Part A of the RCRA permit application in error and now feel that the hazardous waste management activities carried out at the facility do not require a RCRA permit (i.e. the Part A was filed for protective measures). If this is the case, the Agency requests that information supporting this position be submitted no later than November 8, 1988. The Agency can then review the information submitted and correct its records accordingly. The information which must be submitted to make this demonstration is contained in the enclosed document entitled "Facility Part A Withdrawal Request Form."

Finally, some facilities may have closed or are currently closing in accordance with an IEPA approved closure plan. (Please bear in mind this letter is going out to over 200 facilities; some closed facilities may inadvertently receive this letter.) In this instance, the Agency requests that a copy of (1) the closure plan approval letter and (2) the letter from the Agency accepting the certifications of the owner/operator and the rgistered professional engineer that closure was carried out in accordance with the approved closure plan (if closure has been completed) be submitted by November 8, 1988. The Agency will again be able to review this information and correct its records accordingly.

Because of the large number of facilities subject to the requirements of 35 IAC 703.157(f), the Agency requests that all facilities receiving this letter complete the enclosed form entitled "RCRA Permit Information Form." The form has been developed such that it can be used by a facility falling into any of the five categories described above (pursuing a final permit, planning to close, pursuing a permit for only a portion of the interim status units and closing the other units, protective filers, closed in accordance with an IEPA approved closure plan). This form must be submitted to the Agency no later than November 8, 1988, along with all required attachments. Failure to do so may subject a facility to enforcement under State and/or Federal regulations and possible monetary penalties up to $25,000 per day of noncompliance.

The RCRA Permit Information Form and all required attachments must be submitted in triplicate (original and two (2) copies) to the following address:

Permit Section, RCRA Unit
Division of Land Pollution Control
Illinois Environmental Protection Agency
2200 Churchill Road
P.O. Box 19276
Springfield, IL 62794-9276

If you have any questions regarding this letter, please contact Jim Moore at 217/782-9875.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:JEM:mab/1203j/1204j/

Enclosures

cc: Division File
Compliance
Peoria Region
USPEA Region V

FACILITY MANAGEMENT DOCUMENT LOG

Please Print

Facility DOA - Rock Island Arsenal

ID # IL5 210 021 833

Item #	Item Date	Description	Item Filed
RI-22	4-2-92	Draft Permit Sign-off Sheet	Sec 6
23	4-2-92	Letter: G. Hamfler to L. Eastep re Forwarding of draft permit to be public Noticed	Sec 6
RI-24	4-21-92	Memo: G.R. HRUSKA to Files re: site visit	Sec 4
RI-25	5-26-92	S. Robinson to L. Eastep re: Part B application	Sec 2
RI-26	6-18-92	L. Eastep to D. Foss re: Closure plan approval	Sec 2
RI-27	7-14-92	Public Notice: to Deny A Permit	Sec 2
RI-28	7-13-92	FACT SHEET & NOTICE OF INTENT TO DENY A PERMIT - IEPA	Sec 2
RI-29	8-7-92	Letter: L. Eastep to D. Foss re: closure plan	Sec 2
RI-30	9-11-92	Letter: A. Dupont to K. Lesko re: Part B Modifications	Sec 2
RI-31	8-31-92	Letter: T. Nienhouse to L. Eastep re: Submission of Part B revisions.	Folder
		a) Part B revisions - 2 vols + 3 sets of plates	Files
RI-32	10-21-92	Letter: A. Dupont to K. Lesko re: Part B requirements	Sec 2
RI-33	11-12-92	Letter: L. Eastep to D. Foss re: Closure plan NOT approved	Sec 2
RI-34	11-30-92	Letter: L. Eastep to RIA DENIAL OF RCRA PERMIT	Sec 2
RI-35	3-11-93	Letter: T. Nienhouse to L. Eastep re: Response to PART B application NOD	~~File~~ Sec 2
		A. Part B Permit Application (2 vol + blueprint)	Files
RI-36	5-19-93	Letter: L. Eastep to Commander RIA re: approval of closure plan	Sec 2

PART B DOCKET LOG

Please print

Facility DOA / ROCK ISLAND ARSENAL

ID # IL5 210 021 833

Item #	Item Date	Description	Item Filed *
RI-1	8-25-88	SPILL CONTROL AND COUNTERMEASURE (PREVENTION) PLAN & INSTALLATION SPILL CONTINGENCY PLAN	FOLDER 1
2	10-25-88	Letter: D. Morgan to IEPA re: Submission of PART B Application	Section 2
8		a. Part B Application (Items 20.1 & 21.2)	Folder 1
3	7-27-90	Letter & Submission: K. Bregard to B. Lockart re: Closure Plan for Bldg 33	Folder 1
4	8-30-90	Letter: R. Bregard to L. Eastep re: Revised Part A and Part B applicatio	Section 2
5		a. Part B Application - Vol 1	File
		b. Part B Application Vol 2	File
6	10-26-90	Letter: L. Eastep to RIA re: Approval of Closure Plan for container storage	Sec 2.
7	12-19-90	Memo: G. Hrusker to Files regarding Permitting Issues	Sec 4
8	1-10-91	Letter: G. Hamper to W. Shore re: request for Organic AW Emission Requirements	Sec 2
9	2-1-91	Letter: Achiel Dupont to G. Hamper re: Subpart AA & BB requirements	Sec 2
10	2-18-91	Letter and Submission: A. Dupont to L. Eastep Revision to Part B	Folder 2
11	4-26-91	Letter: A Dupont to K Lesko re: Closure Plan	Sec 2
12	6-30-91	Letter: A. Dupont to K. Lesko re: withdrawal of amended closure plan	Sec 2
13	7-30-91	Letter: L. Eastep to W. Shore re: withdrawal of closure plan	Sec 2
14	12-12-89	Letter: L. Eastep to Commander RIA re: NOTICE OF DEFICIENCY	Folder
15	7-27-90	Letter & Submittal: R. Bregard to B. Lockart re: Closure Plan - Bldg 33	Folder
16	1-16-91	Letter: L. Eastep to Commander RIA re: Part B NOD	Folder
17	10-2-91	Letter: L. Eastep to Commander RIA re PART B NOD	Folder.
18	11-8-91	Letter: J. Hansen to L. Eastep re: Response to NOD	Sec 2
19	4-2-92	Draft Permit	Sec 6
20	4-2-92	Statement of Basis	Sec 6
21	4-2-92	Administrative Record Index	Sec 6

* Folder 1 is arranged by sections.